006 Studies on the Culture of the Chiriguano Indians
[Études sur la civilisation des indiens Chiriguano]

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[Title page]

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Preface

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121 In the chapters to follow, I propose to publish part of the results obtained in the course of the expedition that I undertook in the Bolivian and Argentinian Chaco in my capacity as director of the Institute of Ethnology of the University of Tucumán.

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[101] This expedition took place from February to June, 1929. Its itinerary was the following: Having left Tucumán, I went by railroad to La Quiaca where I stayed for several days, making observations on the more or less half-breed natives of the region. From La Quiaca I went to Tarija, where I remained longer than I might have wished because of the suspicions my trip raised at the time of the Paraguayan-Bolivian conflict.

114 After a 15-day stop I left Tarija to reach the Chiriguano
101 toldерías of the upper Pilcomayo. I crossed the village of Santa
103 Ana, then the Abra del Cóndor, the Narvaez River, the post of
San Diego, passed five kilometers from San Luis (Entre-Ríos) to
stop at the Cuesta de San Simon, where I found the first Chiriguano.
Once having crossed the Cuesta de San Simón I quickly reached
the Salado River, then the Chiriguano villages of Timboy
[126] (Saladito). It was there that I made my best acquisitions of
pottery and where I collected the oldest objects. The inhabitants
[178] of these rancherías, who live relatively far from the highway from
Argentina to Santa Cruz, have preserved the traditions and culture
of their ancestors better than their racial brothers have. From
Saladito I reached the village of Itasiti and then Salado Grande,
[361] in order /296/ to reach the Pilcomayo at the confluence with the
Salado. There, the Chiriguano villages are large and numerous.
The most interesting are those of Ñawirenda, Ibopeytí, and Yumbía.

After stopping for some time in this place, I continued my trip toward Huacaya and the mission of San Pascual de Boicovo.

In one day I went from Boicovo to Cuevo, going by way of the mission of Santa Rosa.

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[178] From Cuevo on I was in the mission of Ivu, which is without doubt the one where the old Chiriguano customs have undergone the fewest modifications.

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114 From Cuevo I left for the northwest toward the Parapiti River
101 region. I crossed this river near Pipi. After stopping in that village,
103 I followed an Indian path which led me to Caruruti, to the home
of my good friend Captain Karnapadyú. I spent a week with him and left him only to explore the whole Caipipendí valley, visiting all the Indian villages one after another. At Caipipendí itself I made fruitful excavations and collected interesting myths.

The limit of my trip toward the north was the little city of Charagua.

I devoted the last part of my trip to more or less long stays in the Franciscan missions of Tarairí, Tigüipa, Machareti, and Ivu.

Before going back to Argentina I made an excursion into the Igüembé valley as far as the village of Masavi.

114 The last two weeks of my expedition were devoted to the
124 study of the Chané Indians who live near Aguaray in the Salta
Chaco (Argentine Republic).

Previously I had been obliged, for various reasons, to stop at Oran for a month. I took advantage of this to make collections among the Ashluslay Indians who come there for the sugarcane harvest.

In this volume I shall publish only the results of my expedition which bring new facts and details to light. Therefore the chapters I devote to the Chiriguano must not be considered an exhaustive study of their culture, but simply as a contribution. Chiriguano culture has been the subject of four important works, two of which are by ethnographers of great authority (1). /297/

1. Nordenskiöld (2, 5, and 10) and Rosen (1) /the underlined numbers following an author's name refer to the boldface numbers in the bibliography/. Campana's monograph on the Chiriguano, which I shall often have occasion to cite, is only a recompilation and reorganization of the manuscript notes left by the Italian missionary, the Reverend Father Doroteo Giannechini. This work is excellent in many respects. As for the book of the Reverend

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121 114 Father Bernardino de Nino, it is only a translation of Campana's article, filled out with copious borrowings from Corrado's work. Nevertheless the Reverend Father Bernardino de Nino added many very interesting details to the texts that he reproduces, which make consultation of his Etnografía chiriguana indispensable.

121 126 My aim was to complete the work of my predecessors and to get together for the Museum of Tucumán a collection which would be truly representative of the last of the cultures which formerly flourished within the limits of the old gobernación of Tucumán. My Chiriguano collections, along with those collected by Nordenskiöld, are, I believe, the most complete ones from this region that exist in the world. They bear witness, I hope, to the richness of this area from an ethnographic point of view, a richness which has been left unexploited and which will disappear in a few years.

121 May these pages demonstrate that every culture is a whole complex, so varied, that no ethnographer can study all its details in the course of a single trip. It is not useless to go back where others have preceded you, for, whatever their merits may have been, the material cannot be exhausted in one time.

122 There remains the paying of a debt of gratitude by thanking Doctor J. B. Terán and Doctor J. Heller, who, as rector and vice-rector of the University of Tucumán, gave me the means to bring about this trip. The new rector of the University, Doctor J. Prebisch, granted me the sizable funds which publication of the results of this expedition required and supported constantly the Revue d'Ethnologie of my Institute. I am eager to make known to him here how grateful I am.

114 122 I wish to express my thanks again to all those who helped me in the course of my trip: first and foremost the Franciscan missionaries who gave me generous hospitality and helped me as much as possible: my debt is particularly great to the Reverend Father Jocundo Ferrari, thanks to whom I was able to carry out without damage the transportation of my collections from the upper Pilcomayo to Cuevo: to Father Angriani who received me so frequently in his Ivu mission. Neither do I wish to forget Fathers

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114 Luis Mattioli, Dionisio Polverini, Juan Nicolai, and Francesco Cattinari, who backed me up on various occasions. The Reverend Father Enrique Biagini did me a service for which I was very grateful by committing me to the care of all the missionaries of the Chaco.

The prefect of Tarija, Colonel Núñez del Prado, facilitated my trip /398/ by giving me a safe-conduct which was particularly useful to me in dealing with the authorities of eastern Bolivia. This man, courteous and intelligent, has just died on the battlefield. I wish to salute his memory with gratitude.

My companion Messrs. Barry helped me during my whole trip and rendered invaluable services which I remember gratefully, as well as the important aid given me by Messrs. Attié of Tarija.

I received cordial hospitality from Mr. Benardi of Ñancaroinza and from Mr. Vicente Constantini, whom I thank here.

Mr. Alberto Torrején of Ibopeyti showed himself to be a host full of intelligence, and his intervention on my behalf with the Indians was very useful to me.

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172 I should show myself ungrateful and unjust if I did not here express all I owe to the Indians themselves, whose reception, once the first mistrust was dissipated, was always so cordial, so generous. Here I should like to cite the name of my old friend, Captain Karnapadyú, of Caruruti, who was a courteous and kind friend to me and who made my stay in the Caipipendi valley so pleasant. Some day may I come back to my Chiriguano friends with mules loaded with knives, cloth, and beads, and thus fulfill the wishes they expressed so often to me.

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First Part

Material Culture

To Eva who was my traveling companion.

Introduction

121 For anyone who wants to verify experimentally, if I may say so, the value of the methods which are being adopted in modern ethnography, for anyone who wishes to judge the factors which condition the formation and evolution of civilizations, there is no better field than the study of the Chiriguano Indians.

We know where they came from, the period when they formed a new nation, the populations with which they mingled or were in contact, the influences they underwent and their duration, and finally we are acquainted with the vicissitudes of their history: in a word, we can be present at the formation and development of this people from their origin to their present decline, an experience unique in South America, rare perhaps elsewhere, and in any case rich in instruction.

Adaptation to the environment, borrowing of new cultural elements, abandonment of traditions and techniques, somatic and linguistic changes, so many problems that the Chiriguano civilization poses and that the historical documents and the collections permit solving or at least clarifying.

122 Chiriguano culture is composed of elements of different origins, borrowed from tribes which had only a little in common with one another. It involves an old Guarani substratum, transformed and entirely renewed by the contribution of the Arawak culture of the Chané, which itself had been enriched and modified by the influence of the Andean populations of present-day southern Bolivia. A common environment and long proximity allowed many a technique and industry of the primitive Indians of the Chaco to be adopted and assimilated by the Chiriguano. The importance of this third component is minimal.

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178 An analysis of Chiriguano culture (see Nordenskiöld, 10, pp. 196-213) makes manifest the heterogeneity which the history of the tribe caused to be suspected a priori. The pottery, basketry, weapons, and furniture almost constantly present disparate characteristics in which are expressed this play of influences, this intermixture of races and ideas of which the present-day culture of the Chiriguano is the product.

/300/ The ethnographer feels all the more at ease in his analysis when at every step history confirms or invalidates the findings to which his comparative work leads him. Thus he walks on firm ground, and the results he has acquired in this particular domain will justify his method when he uses it to solve problems whose data are less complete.

181 The Chiriguano, in more than one respect, deserve to hold a preponderant place in the ethnography of South America. They have played an important role in the history of Bolivia, Paraguay, and Argentina; their civilization has been brilliant and has maintained itself intact almost until our time; besides, they are remarkably endowed from the point of view of character and intelligence. To these qualifications they add that of having built up their civilization, so to say, before our very eyes and of offering to science a field where it moves with some sureness.

In order to understand the point of view I have tried to put forward in this introduction, it is indispensable to know, in its main lines, the early history of these Indians.

Chapter I

000 Historical Outline of the Formation of the Chiriguano Nation

/Eight lines of poetry in Spanish, from Barco Centenera, La Argentina, pp. 185-186, are omitted in the translation./

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175 My intention is not to recount the history of the Chiriguano from the 16th century to today insofar as we can know it from official documents and chronicles. This work has been done and generally well done (Corrado; Kersten, pp. 66-69; Serrano y Sanz; Nordenskiöld, 7 and 8, pp. 45-58; Gandía, 2, pp. 25-56 and id., 1, pp. 161-196; Church, pp. 206-227; Mujía; etc.).

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080 and id., 1, pp. 161-196; Church, pp. 206-227; Mujía; etc.).
174 I shall limit myself to tracing here, in their main lines, the
121 characteristics of the great Guarani migration which ended in the formation of the Chiriguano tribe.

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[199] The Chiriguano Indians belong to the Tupi-Guarani linguistic family. A branch separated from the great Guarani nation or, more exactly, a swarm separated from the whole group of tribes of Paraguay and southern Brazil called Guarani, they came to establish themselves at the foot of the Andes at the end of the 15th and the beginning of the 16th century after crossing the Chaco plains.

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[177] /301/ The causes of this great movement, which swept along so many thousands of Guarani toward the frontiers of the Inca Empire, are explained by the singular attraction which metal objects, clothes, in a word everything that can make life easier and more beautiful, exerted and continue to exert on the Indians. The Guarani of Paraguay and the Tupi of the Brazilian coast had known for a long time about Peru and its riches. From there they used to receive bronze instruments and ornaments of silver and sometimes also of gold (1). At the same time as these objects, confused descriptions reached them of these mountain peoples, so strange, who lived in stone huts, had "deer with long hair" at their service, and who decorated their persons with brilliant jewels.

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[487] Bronze axes, necklaces, bracelets, breastplates, diadems, and goblets of silver reached them by a trade route whose exact position is unknown, but which probably used to pass through the northern Chaco.

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439 The Chané /Chane/ who lived in direct contact with the populations of the Inca Empire and traded with them, played the role of brokers, and with them as middlemen these tools and ornaments reached Paraguay, passing from hand to hand (2).

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1. On the trade relations between the peoples of the Andes and the tribes of the Chaco, Paraguay, and Brazil, cf. Nordenskiöld, 9, pp. 255-259.

2. Hernández, p. 322: "They were asked of what race are those who have the silver and the

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175 437 439 /fn. 2 cont./ gold and how they contracted for it and it came into their possession; they said that the payzunoes, who were a three-days' journey from their land, gave it to their men in exchange for bows and arrows and slaves which they took from other races, and that the payzunoes get it from the chaneses and chimenoes and carcaraes and candirees, who are other Indian peoples who have it in great quantity, and that the Indians contract for it, as was said." /Translated from the Spanish./

175 101 Before going into the regions of the "true metal," the Spanish conquistadors made numerous inquiries in order to become acquainted with the tribes among whom they might find the coveted riches. Thanks to this precaution, we have several lists of the native tribes of eastern Bolivia who lived in contact with the Andean peoples. The most complete of these ethnographic nomenclatures is the one that the valuable Relación de Domingo Martinez de Irala gives us /the following quotations are translated from the Spanish/: "He said that on the left-hand side, which is to the west, there are many races found among the sierras and about which he has information; they are called; turubones, and ayguas, and chanes, and tucoas and ceucoçes, and turucoçes guaracis, and xaraes, and that above them, on the same side, there are some of his race of carios"; (pp. 339-340).

"Asked if he knew or had heard said what race has the said metal, he said that he knew only that the races of the goacamas, and turubones, and xacosy, and garpidic, and huetari, and oadris, and oape, and suacheaguy, and oetary, and asua, and naga, ahuagu, and chanes, and sy, and sycosy, and decoxy, have some sheets, and these races are from the one side of the river and from the other, but that those who

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/fn. 2 cont./ have more are the ayguas; asked if he had seen it, he said that, yes, he had seen their many sheets, but that they are their enemies and sometimes go to war against them; asked who gives them the said metal, he said that he had heard it said that a race which is called vntig from the interior country and who get it, from hand to hand, from the payçunos; asked who makes the doublets /rropetas/ that the said principal wore to appear, which were of cotton, he said that they and all the other Indians named above make them for their clothing; asked if the said ayguas are on banks of the river and on what side, he said on the left-hand side, thus, the west one; asked what food they have, he said maize and mandioca and mandubys and some fish, and other things that they plant; asked if he knew or had heard what Indians are the true masters /señores/ of the metal, if the payxunos or others, he said that he did not know and he had heard that the one who has it is the said ayguas" (pp. 341-342).

"He named among those who were near the river other races from the left side, that is, where the sun sets, called chane, and quiguaracoxi, and chemechalcosy, and maçuacuri, and xaquidy; asked who these chanes are, he said they were like them and spoke caryo" (p. 342).

"Asked if he knew which races are the true masters of the metal, he said that he knew only that he had heard it said that they are the chanes, and payçunos, and carcaras, and they are the ones who have the white metal" (pp. 344-345).

"Asked what races are the masters of the metal, he said that many races have metal, especially the payçunos and guariguari, and çorocotoqui, and cherotono, and turopecoçi, and pane, and

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101 175 /fn. 2 cont./ *tipeono*, and *maracaono*, and *corocotoçe*, and *xamaracoçe*, and *çemeono* and *carcaras*, but that the true ones who take out the metal are the *canires* and *chemaos*" (p. 348).

"Asked if he knew what Indians have the said metal, he said that he knew only that he had heard it said that the Indians that they call *chibivno* and *payçuno*, and *chamoroono*, and *guaycuno*, and *carcara*, and *corotocoty*, and *maya*, and *cocey* *chane*, and that the entire route is populated and that the slaves who absented themselves when those of *ytatyn* killed the *chanes* have already returned to their old seats" (pp. 351-352).

Curiously, a century later in the regions in question, except for the Chiriguano and the Chané, we find none of the tribal names mentioned in the 16th century by the Guarani interpreters. Would these innumerable tribes have disappeared? [178] That does not seem very likely, for up to our times this region has not undergone change from an ethnic point of view. The solution of this problem is given to us by this same *Relación* (p. 350). These names of nations only designate Chané subtribes, as the Chané chief questioned by Irala (*id.*, p. 351) explains very well: "the said *cheroçe* said that they took three days to his country and he knew the route very well because he had been raised there and up to now had not heard news from his country, but now he knew that he wanted to go there with the said captain and that, if he desired, he would go then, and that his race is many, and, even though they are *chanes*, all are called by a name for each part, and for this reason they are called *çeritocoçe*, and from the last houses of his race to the *çorocotoquys* they take three or four days, and

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/fn. 2 cont./ from the çorocotoquys to the payçunos two, and near them are the çurumanos and ximeonos, and from there they take a four or five days' journey to the carcaras who are the masters of the metal, and together with them are the camires who similarly are the masters of the metal." Naturally the "maya" concerned in some of these lists are the Mbayá /Mbaya/ of the Guaikurú /Guaicuru/ family.

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/302/ This infiltration of objects probably lasted a very long time before the Guarani had the idea of going themselves to get them at their source. Notions about the Inca Empire, at first vague and uncertain, must have become more precise little by little and must have increased their desire to know with their own eyes the fabulous men and countries which produced so many beautiful and strange things. We must imagine the attitude of the Guarani Indians toward the populations subject to the Inca as being /303/ in every way similar to that of their descendants, the Chiriguano, and the present-day small tribes of the Chaco with respect to the white men. There are still tribes who have never seen them, but who already possess iron objects whose importance in the struggle for life they appreciate fully. I have in my collections two Tsirakua burins whose points are of iron, and yet these Indians have never seen a white man and probably have scarcely heard of them. If there is a chance to be able to approach without danger half-breed or creole villages, they will do it. Thus it is that we have each year a temporary migration of thousands of Indians toward the ingenios (sugar mills) of Argentina. Among the numerous tribes which make their way toward the sugar-cane plantations, there are perhaps many who had never had any direct contact with the white men to whom they are going in order to seek an easing of their lives and an improvement in their material conditions. By leaving for the Chaco and the Andes, the Guarani thus obey the same aspirations as these poor Tšawanko (Chiriguano) whom one meets in autumn on the highways which lead to Argentina.

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000 on the highways which lead to Argentina. If the Guarani invasion
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175 was brutal, it is because they felt powerful enough to try to take
721 possession of the coveted riches by force. Not long ago the
167 Chiriguano did not hesitate to attack the farms of the creoles if
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721 they profited by it or if a wrong had been done to them.

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We must remember also that the Guarani were warlike;
177 used to overcoming neighboring tribes, they did not draw back
648 at the prospect of distant expeditions and besides were endowed
181 with a spirit of adventure, which has caused them to be called
167 the "Phoenicians of South America." At the beginning of the
[101] 16th century the Guarani were in the full swing of expansion;
[175] the crossing of the Chaco was not going to stop them.

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The first Guarani who crossed the Chaco and came home
177 again richly clothed, adorned with metal ornaments, doubtless
181 aroused the same attitude which is felt toward any modern
167 Chiriguano who comes back to his village after six months' stay
in Argentina. One should see them then, dressed from head to foot, booted and spurred and prancing about proudly on a more or less emaciated horse. Question them about their recollections: with pride they will tell you about their love affairs, will allude to their bloody brawls, and will express their admiration for all the surprising things they have seen. They will talk to you especially about their gains, for they left in order to have knives, axes, heads of cattle. It is those assets which have given them "face" and improved their existence, and the acquisition is clothed in all the charms of adventure and a trip to the land of wonders (1).

1. On the attraction that Peru exerted on the Guarani Indians and on the trips the latter made toward the Cordillera, see the texts cited by Gandia (2, p. 32, notes 1 and 2). This is why the Guarani insisted very strongly that Irala lead them to the land of the Indian "masters of the metal."

In a letter from Martín González (1556) quoted by Gandia, it is said that at Asunción "there are many Indians who have gone, come

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> 177 181 167 there two or three times with their children and wives, through here in front of this city, by a river which would be two leagues from here, which goes to the city of the Plata, and near the river the Indians from here are settled and more throughout the cordillera, and they say that they are not a hundred leagues from here.
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> "Also these carios have gone there to the sierras and come by another river, which is up to forty leagues from here, this lower Paraguay, which is called the Ypití; and thus likewise carios villages are there in the sierras, near this said river, which goes, according to what those who come from Peru say, to near the city of the Plata." /Translated from the Spanish./

167 177 797 /304/ The migration of the Guarani toward the west goes on today in a not very apparent form but with a certain regularity. It is probable that the secularization of the Franciscan missions, which will bring in its wake the impoverishment of the Indians and will render their fate more miserable in their present homeland, will have the result of accelerating this exodus.

174 167 Were there no other motives than the desire to pillage or trade which might formerly have led the Guarani to the land of metal?

Apparently not. But every ethnic phenomenon is complex in its causes and effects, and trying to explain it by one single factor is an attempt always superficial and subject to caution. The work of the historian, like that of the ethnographer, is to separate all the elements which have combined to produce the facts which traditions and chronicles record.

[721] Granted that the Guarani migration had as its direct cause the taste for pillage, the singular attraction which Peru exerted on the Indians of the forests; but was there not also some obscure belief, some mystic aspiration which might have played its role in this great collective adventure? Along with the definite ambition to conquer was there not mixed the memory of some old myth which might have contributed to launching this movement? I think so.

Tupi-Guarani SL6
Tupinamba S09

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T-6 773 [184] All the Tupi-Guarani tribes, the northern as well as the southern ones, knew in the 16th century and still know a myth about a "Land without affliction," where men live always young and immortal, where everything grows without effort, where game falls by itself under the hunter's arrow, in a word, a kind of earthly Paradise where the great civilizing God has withdrawn after effecting his "transformations" in this world below and giving T-6 [775] manioc to men. The dead will join him if they are buried according to the proper rites and if they have won out over all the ordeals which await them on the road to the Beyond. The salient feature of the "Land without affliction" is that it can be reached without necessarily going through the door of death: pious and bold men can go to live there on condition that they take the right road, are worthy of it, and know the rites. Powerful magicians have always had access to it, /Plate I appears here/ /305/ and their example has given rise to the hope that entire tribes would be able to reach it also if they were led by medicine men perfectly informed about the location of this earthly Paradise. T-6 175 167 773 From the 16th century on we can follow tribes in their quest for this promised land and see them undertake vast migrations to get there: some took place toward the east, that is, toward the ocean; others toward the west in the direction of Peru (1).

1. On the Tupi-Guarani migrations in search of the "Land without affliction," see Métraux, 1, pp. 6-22. I have analyzed the myths about the "Land-without-affliction" and studied the mystical movements these beliefs instigated in a chapter of my book on the religion of the Tupinamba (see Métraux, 3, pp. 201-224).

Ta 175 167 Let us cite as a reminder the migration of the Tupinamba, who in 1539 went up the Amazon to arrive in about 1549 in Chachapoyas province in Peru; the two migrations which had as their scene of action northern Brazil, in 1570 (?) and 1609, and whose religious nature is undeniable; finally, always for the coast of Brazil, the wanderings of these Tupinamba, who, having

[Text Continues on P. 16]

Plate I

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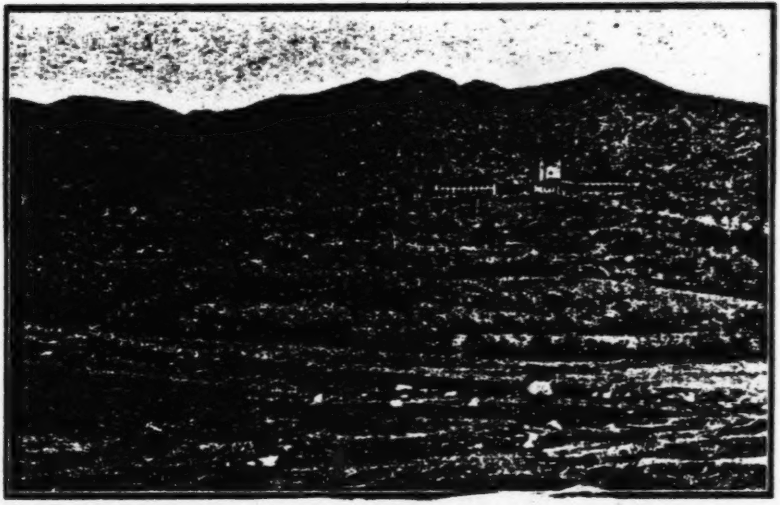

1. Panoramic view of the Franciscan mission of San Pascual de Boicovo (Huacaya Valley). (Photo. by the Reverend Father Honorato Catinari)

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2. Landscape typical of the mountainous region occupied by the Chiriguano. View taken in a gorge in the neighborhood of the mission of San Pascual de Boicovo (Photo. by Reverend Father Honorato Catinari)

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Tupinamba SO9
Guarani SM4
Tupi SN7

Ta /305 cont./
175 left in about 1600, arrived ten years later on the middle course
167 of the Amazon on the island of the Tupinambarana after staying
at the sources of the Madeira not far from the Andes. The last
G 175 in date of these ethnic movements of mystical origin is the one
167 which led the Apapokúva-Guarani /Apapocuva/ from the frontier
of Paraguay to the coast of Brazil and which lasted more than a
century, from 1810 to 1912.

Ti 175 The vague knowledge that the Tupi of the Brazilian coast had
167 about the marvels of the Inca Empire explains the trek toward
the west of some of these migrations. Having arrived at the seacoast and seeing that it was impossible to reach the "Land without affliction" in this direction, it is possible that the Tupi began to look for it in the other direction, as did several groups of the Apapokúva-Guarani not long ago. The prestige of the Inca civilization doubtless must have influenced their decision, and in many cases they certainly tended to merge it with that mythical land where they wanted so ardently to go.

Ti If I risk this hypothesis, it is because of the impossibility of
[174] explaining otherwise this rush toward Peru which took place in
the 16th century among certain Tupi tribes of the coast of Brazil.
Ta Such a point of view is not too bold, for otherwise how could one
174 justify the eagerness displayed by the Tupinamba to reach Peru
175 after going up the Amazon in the effort they made in 1539 to
167 enter the "land of immortality and eternal rest"? How can one
773 explain why the Tupinamba came a century later to settle
temporarily on the upper Madeira near the Andes, when they too
were pursuing the chimera of the "Land without affliction" (2)?

2. When I was concerned with this migration (see Métraux, 1, pp. 22-24), I had believed, on the strength of Acuña, that the cause had been the desire to escape the tyranny of the Portuguese. Nevertheless I was not surprised to learn later while reading Heriarte's book (pp. 41-42) that these Tupinamba had undertaken this long exodus to seek the "Land without afflication." The passage in question is of the greatest interest and must be

Tupinamba S09
Guarani SM4

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quoted in its entirety: /see the foreign text for the passage quoted in Portuguese/.

Something had to /306/ push them toward the west and determine the choice of their itinerary; the mirage which was attracting them was the one which was to cost the lives of so many Spaniards later on. It is a matter of the "great tidings" of this mysterious country abounding in riches, located beyond the forests toward the setting sun, and which the Tupinamba certainly likened and then merged with the "Land without affliction" about which the old myths told.

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In the same period an analogous tendency to identify the country of the Inca with the one where the culture hero lived can be noted among the Guarani of Paraguay.

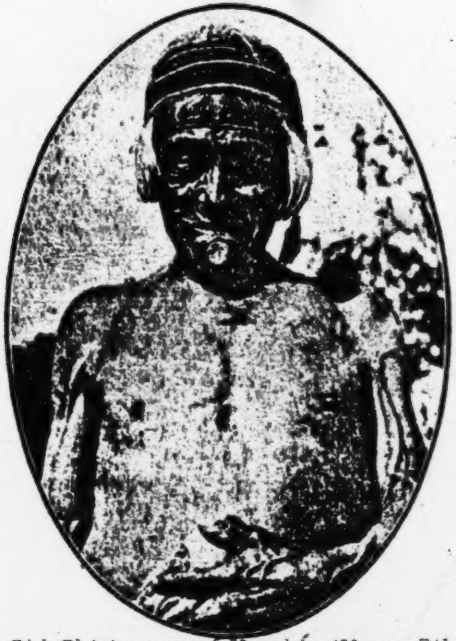
There is a very interesting, but seldom cited text which shows very well how the Guarani pictured the Inca Empire at the beginning of the 16th century. By comparing it to what we know of the myths of these same Indians, we shall be able to draw many a curious parallel, and I hope by this means to demonstrate that the Guarani believed they saw in the Inca their culture hero, Candire.

The document in question is found in the Relaciones geográficas de Indias (Vol. II, pp. LXXXIII-LXXXVII), where it comes under the following title: Relación general que se tomó en pública forma y se envió autorizada al virrey en la provincia de los Xarayes, que es en 17 grados sobre el rio Paraguay, 250 (leguas) de la Asumpcion, donde habia llegado el general Nuflo de Chaves con 150 hombres, con órden é intento de poblar en ella, y despues, por la relación que tomó paso adelante /General account which was put in published form and, authorized, was sent to the viceroy in the province of the Xaraye, which, at 17 degrees, is above the Paraguay River, 250 (leagues) from Asunción, where General Nuflo /Nufrio/ de Chaves arrived with 150 men, with orders and intent to colonize in it, and afterwards, by the account that he took further measures/.

/306 cont./

773 173 175 [648] The Spanish, addressing the Uratuvere, who formed a small Guarani colony in the region of the Xaray /Xaraye/, declared to them that they had come to bring them iron, to chastize the bad ones and to reward the good ones. To that the latter answered "that they were very pleased since they had very much wanted to see us in their lands, and that through us they would learn the days and God would not be offended with them and would give them more fruits on the land, and that their chief, Candire, had so wished it." /Translated from the Spanish./ The account continues in these words: "He had asked them where he was and why they called him Candire. He said that he was dead, and as for the reason for the name, he said that in times past his father was called Caya, who united the other neighboring peoples and entered among the Ortugueses /Pl. II appears here/ /307/ and among the Ontes, until he arrived at the towns of Paicocoro, the chief cacique, and the towns of Paiçuri, and he asked for the Candire who is master of the true metal and of all good things." /Translated from the Spanish./ At first sight one sees in this passage an obvious contradiction which can only be explained by the difficulties the Spaniards had in understanding their interlocutor: Candire on the one hand, is represented as a powerful Guarani chief who led them in a migration, and, on the other, he is a personage, "master of the true metal and all good things," in the quest of whom this same Candire left! Let us look further and try to disentangle this confusion. The country where Candire lives is depicted as having "deer with long hair" from which clothes are woven; gold and silver are found there, as well as a yellow metal which smells bad and with which tools are made (copper and bronze). Several lines farther on the Guarani informant declares that in the Sierra de Acharagua there exists a river from which yellow metal is taken: "Asking what Araraguagua (sic) is, they said that it is a very large sierra that continued far, and that one part was delimited by a very large lake, and that in the other part was a very large population of people who had only one chief, who was lord of all, who was called Candire; and that in the latter's presence all joined to

[text continues on p. 20]



1. Old Chiriguano of Yumbía (Upper Pilcomayo). Note the enormous labret and the head band.

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2. Karnapadyú, "captain" of the Carurutí region near the middle course of the Parapití River. (Photo. A. M.)

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773 /*307 cont.*/
173 sing with instruments of true metal, in the form of big reeds,
175 which made a good sound (these are the Guarani rhythm sticks); and they had others they played with the mouth. He had shown him a trumpet; they said that that chief, *Candire*, took his father's name, because in that land he killed many *candires*, who killed all the other people who had left with his father." /Translated from the Spanish./

The country of the *Candires* is the one where God put all the good things of this world; gold abounds there, one finds there fortresses defended by ditches. The *Candire* warriors are clothed, their battle-axes are of metal and their shields of gold and silver. In the interior is found white and yellow metal, etc. The land of the great *Candire* is located, geographically, beyond the Guapay River; to go there one crosses the land of the *Timbu*, of the *Baure* (Mbaure) who receive golden objects from the *Candires*. Near the land of the *Candire* live the Chiriguano and other *Candires*, Guarani and, moreover, relatives of the *Uratuvere*, who gave this information to Nufrio de Chaves.

It is obvious that the land of the *Candires* is none other than Peru (1). In the great *Candire* we have no trouble recognizing the Inca. But why this merging of *Candire* and a Guarani chief /*308*/ and then the idealizing of this personage? Finally, what is this migration in search of the great *Candire*? The key to the problem is furnished us by another text from a slightly later period (1589) which concerns the Guarani of Itati, emigrants into the province of Santa Cruz de la Sierra, that is, among the ancestors of the present-day Guarayũ /Guarayu/ and Pauserna. It is a matter of a Jesuit *Annua littera* (see Métraux, 5, p. 924), in which much is said about these Indians, designated by the name of *Itatines* because of their country of origin. The anonymous

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1. In the commentaries of Alvar Nuñez Cabeza de Vaca (Hernández, pp. 288 and 322), it is likewise a matter of the *Candires* as a people whom we can also identify with some Inca tribe.

Guarani SM4
Guarayu SF11

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173 Jesuit, author of this letter, tells us that Candire is their god.
175 Actually, even today, Candir has a place among the culture
GU gods or great gods of the Guarayú. In a fragment of Guarayú
[776] mythology published by Cardús (p. 76) Candir appears at the
[773] beginning of the world in the company of Mbiracucha (Viracocha),
Zaguaguayu, Abaangui, and Tamoi. The creation of the
Negroes is attributed to Candir.

G There is nothing extraordinary in seeing the Inca decked out
177 with the name of a Guarani god or culture hero. Confusion must
773 have been produced there analogous to that provoked nearly
everywhere in South America by the arrival of the white men.
As we know, the latter have almost always been merged with the
culture heroes. In the same way that the Tupinamba and Guarani
saw in the first Spanish or Portuguese the descendants of the culture
god or hero, it is possible that the ancient Guarani pictured Peru
as the mysterious region to which the Great Ancestor had withdrawn;
and in the sovereign of that empire they doubtless believed they
recognized the culture hero himself, Candire.

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167 All those who know the Indians of tropical America from
174 having seen them will have no difficulty in picturing these
migrations of the Guarani toward the Andes.

G When an enterprising chief with his "soldiers" succeeded
[721] in crossing the Chaco and making some fruitful raid among the
Chané, nothing else was needed for the news to spread from
mouth to mouth upon their return and arouse everywhere the
G desire to imitate him and the hope of similar gains. In each
174 village the affair was discussed, the chiefs talked in the
167 evening around the fire or at the time of the great collective
721 drinking bouts, and the young men dreamed of obtaining, in their
[177] turn, silver ornaments, bronze axes, and the long woolen shirts
in which those who had come back from the land of the Candir
dressed. Here and there people decided to leave in the good
season to try their luck. The inhabitants of several villages
took counsel together to set the date of departure and they
prepared for it slowly. The women busied themselves with the
provisions, roasted corn and made flour of it or grated manioc
which they transformed into cassava bread. Others prepared
corn beer for the feast which would precede the departure.

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Contingents from several neighboring villages combined, probably in order to face together the perils of the road (1).

1. In the course of the survey he conducted on the Paraguay River by order of Governor Alvar Núñez Cabeza de Vaca, Martínez Irala had the chance to question some Guarani near Puerto de los Reyes, one of whom gave him the following information, which throws light on the manner in which these migrations took place: "asked if there are some houses of his race ahead of them, he said that, yes, there were five or six principals; asked if they go for the metal to the sierra where they extract it, he said that they are not accustomed to go there because they are few and have enemies nearby, but those of the last houses go sometimes and he went there once; asked how much time it takes from here to where the metal is, he said that it takes five moons; asked with whom he went for the said metal, he said that in the past many principals from paguay and Indians from the port that they call ytatyn came, and, passing through a land called ytapua, which is a four-day trip from the last houses of his race, those of the said house going in search of said metal, they met on the way and went together and came to a house of Indian slaves, enemies of theirs, and that from there they returned with all their men and also some of those from ytatyn, and the others went on, and I have heard it said that they took the said five moons to get to where the said metal was ..." /translated from the Spanish/ (Relación de Domingo Martinez de Irala, pp. 349-350).

/309 cont./
174 If they were under the authority of a powerful chief, the expedition
169 gained in cohesion and numbers. In no case must one see in
721 these migrations a national movement carried out according to
619 a pre-established plan and involving the whole group of Guarani
tribes simultaneously. These Indians, like all in tropical
America, have never had a very clear consciousness of their
unity, and, even in the face of a common danger, the idea
never occurred to them that similarity of language and culture
might create a bond of solidarity among them. All the more
reason why this individualism of the group or tribe was to
manifest itself with particular acuity when a simple pillaging
expedition was afoot.

174 The columns of Guarani warriors who penetrated into
721 the Chaco bush doubtless included only a few women. The
169 men advanced, walking in single file, bows and arrows in hand,
22 while several girls followed behind with baskets full of pro-
262 visions on their backs. If these ran out, the men hunted along
[411] the way or fished in the rivers, such as the Pilcomayo if they
[482] were following its course. When game or fish were lacking,
they gathered fruit: palm cabbage, algarroba pods, and
chañar fruit were there, which provided a substantial diet,
but it was still necessary to choose the season when they were
[825] ripe, in order to travel. They watched the flight of bees
in order to find honey, and they did not scorn certain insects or
169 their larvae. The problem of water was the only serious one:
721 it was solved by collecting what the caraguatá leaves held at
174 the base: they sucked the root of certain tubers (the /310/
271 sipóy (1) of the northern Chaco) and quenched their thirst at
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the small ponds encountered on the way.

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[139] 1. This is a Bignoniaceae or Begoniaceae (?). This plant has the appearance of a liana whose bulb is full of fresh water. (Diccionario Chiriguano-Español y Español-Chiriguano, p. 197).

/310 cont./

124 167 472 241 Sometimes too they stayed several months in a spot which appeared fertile in order to sow manioc and corn, waiting for it to grow before continuing the march. García, in the course of his long expedition, had left five of his men with a tribe so that they could provide for the feeding of his band on his return (7).

> 7. Relación de Domingo Martínez de Irala, p. 361: "asked how many days it seems to him that they might count on to get here by the route of the said García, he said that he does not know, but that it seems to him that he would know the land and that the route is very wide and big; asked if there were food on that route he said yes, and that much of the food that they have is mandioca, and corn, and gourds, and mandubis, and that said García left five of his slaves along the route with a certain race, in order that they might have food for him when he returned;" /translated from the Spanish/.

167 174 721 484 The going was slow, for it was necessary to clear a path in the thicket; and this job, difficult for white men armed with machetes, must have been even more so for the Indians in pre-Hispanic times. With their stone axes, their clubs, and fire, if there was no danger in lighting one, they opened up a path which the rear guard and other expeditions followed. Besides, [142] [illegible] the Guarani, accustomed from childhood to life in the great woods, certainly had that astonishing litheness which allows their descendants to slip into the thickest copses, avoiding branches and thorns (8).

> 8. Hernández, p. 200: "He said (a Guarani is speaking) that he went over that route a long time ago, and when those of his race would pass through, they went along opening the route and cutting trees and clearing the land, which was very brambly, and that it seems to him that

/310 cont./

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[484] those routes would already have closed up again with forest and grass ..." /translated from the Spanish/.

From time to time there were skirmishes with the Guaikurú, Samuko /Zamuco/, or Matako /Mataco/ Indians, but for the Guarani, who for a long time had been used to fighting the wild Indians of the Chaco, these combats did not take them by surprise. They contented themselves by attracting the least possible attention by avoiding setting fire to the bush or simply making too much smoke.

167 None of the details I have just given is the fruit of my
174 fancy. In order to describe these migrations it has been
175 enough to recall the scenes I witnessed among the descendants of
129 these ancient Guarani and to glean some facts from the chronicles or documents in which are recounted for us the crossings of the Chaco made by the Guarani before or during the Spanish con-
484 quest. Does anyone want some examples? I take them from the
175 commentaries of Alvar Núñez Cabeza de Vaca and from the
648 Relación de Domingo Martínez de Irala.

722 /311/ This has to do with the entrada which Governor
262 Alvar Núñez Cabeza de Vaca made into the Chaco in search
[129] of a way to the country of the Chané. "The Guarani Indians whom the governor took along lived on what the Governor had them given out of the reserve provisions and on honey which they drew from the trees. They also procured some game for themselves by killing peccaries, tapirs, and deer, which seemed to be abundant in that land; nevertheless, since the band who came with him were numerous, they made noise and put the wild animals to flight, which made the hunting not very fruitful. Spaniards and Indians also ate the fruit of wild trees, of which there was a great quantity ... they took advantage likewise of the fruit of the palm trees which abound in this region. They do not eat dates, but are satisfied to break their pits. The inside
[252] is round and like a sweet almond. The Indians make a flour of it, which is an excellent food; they also eat the palm cabbages, which are very good." (Hernández, p. 303.)

G /311 cont./

175 484 648 [262] G [271] Elsewhere (Hernández, p. 241): "The Spanish, taking with them as guides some Indians and several individuals who said they knew the way, walked for thirty days across deserts where they suffered very much from hunger and thirst, to such a degree that some Indians died ... they returned eating wild thistles all the way. For something to drink they extracted the juice from these thistles and other weeds."

G [721] "Aracare ... ordered them (the Guarani who were accompanying a Spanish expedition into the Chaco) to set fire to the prairies they were crossing, which was the equivalent of warning the enemy Indians whose territory they were going through to come and bar their way and kill them. They did that against the custom and discipline observed by those who make expeditions in this country and against the practice of the Indians themselves." (Hernández, p. 228.)

A Guarani from Puerto de los Reyes, who had taken part in an expedition to look for metal, reported to Irala "that he had heard it said that they took five moons before reaching the place where the metal was, and he added that the ones from Itatin who lived more than a hundred leagues lower asserted that they took no more than three months and claimed that they made this trip in five months since they had to pass so close to the spot where their homes were. He said that what he was claiming was the truth, but that the duration of this trip was due to the fact that they often stayed to eat in regions which appeared fertile and that during the time he was with them they stayed in one place three months and that this was why it took them so long." (Relación de Domingo Martinez de Irala, p. 350.)

G 175 167 721 C 167 Against the frequency of these warlike expeditions of the Guarani, there /312/ will be raised the objection of the insurmountable obstacles the Chaco presents, the unprecedented difficulties the Europeans had in trying to cross it, the bloody sacrifices all the expeditions risking it must have made. I shall reply by reporting the account of a contemporary migration made to me by my old friend and host, "Captain" Taruirí of Caipipendí. Some years ago, old Taruirí, having learned

167 /312 cont./Some years ago, old Taruiri, having learned
[464] from some Chiriguano that Brazilians were "cariñosos," that is, generous, had the idea of going to their country to find work, for which he hoped to be well paid. He banded together with 45 other Chiriguano before whom he held out the glittering fortune which awaited them in the country to the east. With this adventurous spirit and boldness which characterize the Guarani, they did not hesitate to take off toward the unknown. They first passed through Chané territory and followed the course of the Parapiti to the desert. There they rushed boldly into these unexplored regions, dried-up expanses, which separate the Izozoc from Chiquitos. They were all armed with bows and arrows to defend themselves from a possible attack by the Tsirakua, the tracks of whose squared-off sandals they often
[271] saw in the sand. No water, of course, but only sipóy roots,
[824] which permitted them to stand the thirst. After 12 days of walking, this band arrived at Chiquitos, then from there reached the Paraguay River and Corumbá. Taruirí was not a little surprised to find brothers there, "that is," he explained to me, "people who spoke my language, badly it is true, but who nevertheless made themselves understood." When I inquired discreetly as to the success of his business over there, Taruirí answered, shaking his head and in a tone shot through with sadness and disillusionment: "All that was only a lie," todo era engaño.

Taruirí does not know and will never know that by doing this he accomplished an exploit that would be the pride and glory of an explorer. For him, it was a question of a simple trip, scarcely longer and more arduous than the one he undertook in the past to go to Argentina.

173 Does anyone want other modern examples of their spirit of
539 adventure and of that ease with which the Guarani move about?
648 I transcribe as such the curious tale told to me by the Indian
484 Cipriano from the Ivu mission, who, confused as he may be, refers to definitely authentic facts:

C /312 cont./

173 539 648 484 C [643]

In olden days numerous Paraguayans emerged into our territory near the Izozoc and they went to fight on the side of the Guarayú and Santa Cruz. From there they went on to Cochabamba. They gave battle over there, then went to Oruro. Their colonel was killed. They scattered in every direction. One of them came to Macharetí where the "Capitan grande," Mandepona, was. The latter told Cipriano, who was then a young man: "Let us go to Paraguay." Mandepona had given this Paraguayan ten "soldiers." Cipriano did not want to go with them. The ten went down the Pilcomayo and arrived at a village near Paraguay. /Plate III appears here./ /313/ A soldier richly decked out with silver, with a horse whose harness was of the same metal, came to meet them to examine them. The Paraguayan they were escorting went to speak with this soldier, but the others did not hear what they were saying. While these two were talking, they saw the Toba arrive with a piece of cloth between their legs and their chests and arms painted with charcoal. The Toba asked them where they were coming from and where they were going. The Chiriguano answered: "To visit you." The Toba refused to allow them to continue on their way, although they were only one league from Paraguay. As an excuse they told them that they were in the act of making war. The Paraguayan rode behind the soldier, and the ten Chiriguano returned to Macharetí.

The first part of this story seems to be a modern adaptation of Alejo Garçía's adventure. I do not know what event could have given rise to this legend, which, had it been true, would have been very much to the taste of the Paraguayan government. As for the trip of the ten Chiriguano from Macharetí, it has the appearance of being wholly authentic.

C G 175 648

The crossing of the Chaco is a less difficult undertaking for Indians than for white men. Formerly these trips from the Andes to Paraguay must have been facilitated by a greater density of the native population. It is enough to recall the relatively easy trip of Juan de Ayolas going from Paraguay to the country of the Chané and coming back without having to cope with any particular obstacles. The exploration of Alvar Núnez

[Text continues on P. 30]

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Plate III

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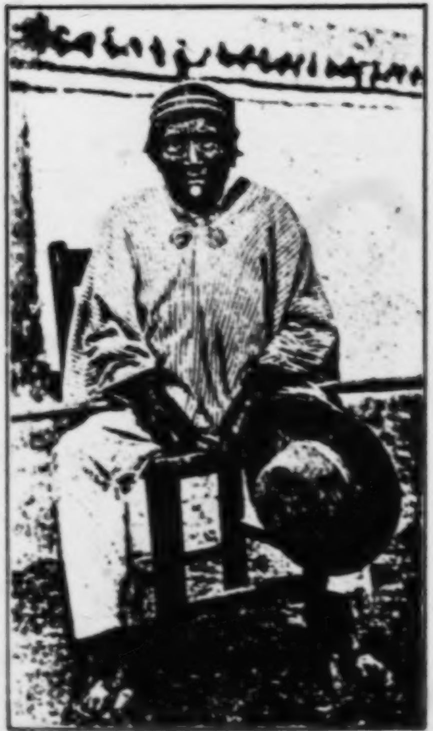
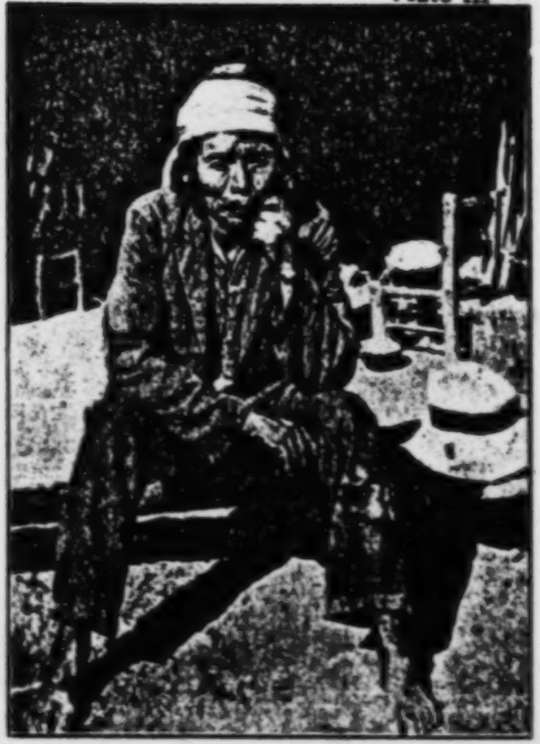


1. Mandepona, the most illustrious Chiriguano chief of the past century. His authority extended not only over the village of Macharetí, where he lived, but over vast expanses of the Chaco. (Photo. by the R. P. Honorato Catinari.)



2. Type of Chiriguano Indian from the Igüembé Valley. (Photo. A. M.)

C
G /313 cont./ The exploration of Alvar Núñez
175 Cabeza de Vaca, continued by his lieutenant, Francisco de
484 Ribera, is a second example that shows very well that the
excursions of the Guarani did not constitute exceptional deeds
that were extremely dangerous to accomplish.

Having arrived at a certain distance from the spurs of the Andes, the Guarani entered the territory of the Chané Indians.

It was in one of these numerous warlike ventures of the
C Guarani that the Portuguese adventurer Alejo García took part
G with several other comrades.

175 I am convinced that the 2,000 (according to Díaz de
167 Guzmán, p. 26) Guarani whom this adventurer accompanied
484 as far as Peru formed only one of the numerous bands of warriors
[162] of this nation who, each year, from every point of the Guarani
territory, used to cross the Paraguay River, then the deserts of
C the Chaco.

G Ruy Díaz de Guzmán, who reports this event, sees things
114 in too simple a light. A migration is not made at one time
175 nor in one year. That of the Guarani lasted perhaps several
167 decades, without, however, necessarily speaking of centuries.
484 Twenty or thirty years must have sufficed for the nucleus of the
174 Chiriguano nation to form between the upper Pilcomayo and the
C G Guapay River. The penetration of the Guarani into /314/ the
175 Chaco took place in a rather chaotic and incoherent fashion.
167 The conquistadors were continually meeting on their route
648 Guarani groups who, for one reason or another, could not
484 succeed in joining their brothers established beyond the Chaco.
These Guarani, who blazed the trails followed by the invaders,
were valuable guides for the Spanish adventurers, and they
were the ones who led them to Peru. For long years there
were uninterrupted communication and incessant coming and
going between Paraguay and the eastern slope of the Bolivian
Andes.

C & 175 167

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Making a critical study of Alejo García's story would be to follow paths already traced out and, besides, to leave the province of ethnography. This episode of the Conquest, so closely mingled with an ethnic phenomenon, appears today as a major event whose repercussions on the development of the Provinces of the Río de la Plata were considerable.

C & 175 167 721 726 I 726

Alejo García's expedition is distinguished from the preceding ones by its scope. Not content to raid the Chané, the Guarani Indians who formed this column had the audacity to attack the Inca fortresses of Cuzco-Toro and, after taking them by storm, to penetrate as plunderers into the provinces under the authority of the Peruvian emperor. The invaders crossed the frontier between Mizque and Tomina and advanced 40 leagues into the interior. Near the villages of Presto and Tarabuco, not far from Chuquisaca, they were stopped by the Charcas Indians, according to Díaz de Guzmán, by troops raised in the
C & [727]
Kontisuyu, according to Peruvian chronicles. The Guarani withdrew in good order, without abandoning the conquered booty.

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Huayna Capac, following this invasion which took place during his reign, had the destroyed forts restored and put strong garrisons in them.

C & 175 721 726 I 726 701 C & [291] [266]

The Guarani invasion into Tahuantinsuyu is reported at the same time by the chroniclers of Paraguay and those of Peru (1).

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(1) Sarmiento de Gamboa, pp. 109-110: "While Guayna Capa was occupied in this war with the Cayambi's, the Chiriguanas, a mountain people, naked, and who eat human flesh and have a public slaughter house for it, joined together and, coming out from the harshness of the mountains, entered the land of the Charcas, which had been conquered by the ingas /Incas/ of Piru /Peru/. And they fell on the fortress of Cuzcotutyo, where the inga had a large garrison of frontier troops against the Chiriguanaes. And as they suddenly sallied forth, they entered the fortress and killed them all and among those of the land,

Guarani SMY
Inca SE13

/314 cont./

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they caused great destruction, robberies, and deaths.

"This news went to Guayna Capac in Quito, who received it with great sorrow and immediately sent a captain of his, named Yasca, to Cuzco to form an army, and with it he was to go to wage war on the Chiriguanaes. The captain left for Cuzco, taking with him the guacas /huacas/, Catiquilla of Caxamarca and Guamachuco and Curichaculla of the Chachapoyas and the guaca Tomayrica and Chinchaycoaha with many of the guacas' own men. And he arrived in Cuzco where he was very well received by the governors named Apo Hilaquita and Auqui Topa Inga, and, forming his army, he left Cuzco for the Charcas. And on the way he took many troops from Collao, with which he came to the Chiriguanaes and waged cruel war and took some of them prisoner, whom he sent as specimens to Guayna Capac in Quito, so that he might see the strangeness of that people. And Captain Yasca rebuilt the fortresses which were there, and, putting in them the necessary garrison, he returned to Cuzco, where he dismissed the troops, and each one went back to his land." /Translated from the Spanish./

Santa Cruz Pachacuti, p. 304: "And at this time (of the Inca Huayna-capac) there came the news that the Cheriguanaes had come forth to take the lands of the ynga, which news upset the ynga, and so he sent the most experienced captains for the conquest of the Chiriguanaes, with 20,000 Chinchaysuyo men." /Translated from the Spanish./

Guarani SM4
Inca SE13

/314 cont./

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Balboa, p. 105: "But this fiesta was interrupted by the news from Cusco that the Chiriguanes, a cruel and brave people, had killed the garrisons of the frontiers and leveled the whole country as far as Chuquisaca and its surroundings. Guayna-Cápac was disturbed by this news, disguised his grief as much as he could, and called to command his army a man full of bravery and intrepidity, named Yasca, whom he ordered to punish this aggression. Yasca departed from Tumibamba at the head of the best of the ingas soldiers; moreover, he had orders to recruit from Caxamarca on all the men that he found, in order to wage the war which he was going to undertake; and in order to arouse their valor he ordered each nation to bring with it the great Guaca of its country, which is an idol besides, and to which they very frequently come. He arrived at Cusco with a large army made up of different nations; through all parts the governors welcomed him with affection and gave him great honors. Provided with everything that he might need and his army augmented with the best men from Collao, he continued on his way with the utmost speed in pursuit of the Chirihuanas; many battles were joined, without any victory declared by either of the two armies. Nevertheless Yasca took some prisoners, whom he sent to Quito. He repaired the damage that the enemies had done in the country, and he left a new garrison in the fortresses and on the frontiers; afterward he returned to Cusco, where the governors rewarded the soldiers who had distinguished themselves and permitted them to return to their countries, taking their Guacas, or idols." /Translated from the Spanish./

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Cieza de Leon, p. 228: "(Guayna Capac) sent captains with troops of war to the Chiriguanaes; but things did not go well for them,

Guarani SM4
Inca SE13
Chane SF8

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/314 cont./

> for they returned, fleeing." /Translated from the Spanish./

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They agree /Plate IV appears here/ /315/ on the essential fact and on the approximate date of the event. This coincidence between traditions whose sources are so different and which have been collected independently from each other in regions as far apart as this leaves absolutely no doubt about the purely historic nature of this invasion. Nordenskiöld (5, pp. 70-77) in the course of his last trip into the Chaco (1913-14) was able to study the ruins of the small forts of Cuzco-Toro (today Incahuasi), which always stand at the edge of Chiriguano country. By their style they belong to the Inca period. Nordenskiöld (7) and I had thought that García's expedition was the first in date that the Guarani had launched toward Peru. In reality, other Guarani emigrations preceded it by several years, as Gandía (2, p. 30) (1) succeeded in /316/ establishing.

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1. Gandia (2, p. 30, note 1) cites various passages taken from old, reliable documents which seem to indicate that Garcia's expedition had been preceded by other previous migrations which, starting from Paraguay, had ended up in the establishment of Guarani groups beyond the Chaco. Thus the Tarapecoci recounted to Francisco Ribera how in ancient times, before García, the Guarani had come to plunder and massacre them.

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A Relación anónima /Anonymous Account/ of 1545 (pp. 310-311) reports in these words the remarks of some Chané Indians who were questioned by Alvar Núñez Cabeza de Vaca at the time of his expedition on the upper Paraguay: "among the people found there are certain yndios /Indians/ who are from the interior country, those of the chane people

[Text Continues on P. 36]

Plate IV

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1. Santos Airedyú, the last "capitan grande" of the still independent Chiriguano Indians. Airedyú is completely assimilated to civilization and lives like a rich Bolivian farmer. He is a man of great character. (Photo. A. M.)

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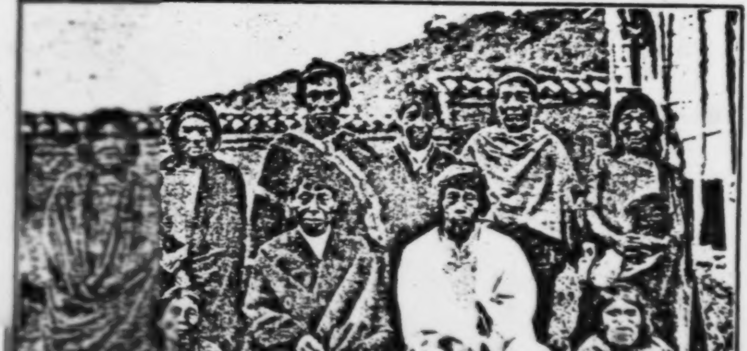

2. Group of Chiriguano in a Franciscan mission. (Photo. by the R. P. Honorato Catinari.)

/315 cont./

E /fn. 1 cont./ who came to us themselves
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167 and others from near their land, and what
175 they say agrees with what this one or that
721 one tells us, and they say that they were
726 slaves of a xristiano /Christian/ who came
ce from the island of santa catalina and de-
648 manded gold and silver and they say that
567 he got them from a race of carioes who took
them for slaves and it was said the xrisptiano
garçia, etc." /translated from the Spanish/.
This passage seems to indicate that García
and his companions found Guarani already
established at the foot of the Andes and that
the latter had already reduced Chané groups
into slavery.

E
G The most significant of these texts is the one
175 we find in the Relación de Domingo Martinez
648 de Irala, pp. 346-347. Irala was at Puerto de
ce los Reyes on the Paraguay River when "on the
175 brigantine where he was, there came a princi-
648 pal with three other yndios /Indians/ who spoke
567 the guarani language just like the guaranis
themselves; the said principal said that he is called theroçe, and one yndio of those who came with him, who was small in body, said that he was called xagoani and the guaranys called him maraana; without being asked anything, he said he had lived and had been a slave without pay /esclavo de gracia/, that the yndios named him maratya and called him by the two names; he and the said principal and all his house were not from the said port and they were the ones that were called chanes; asked through the said languages why they were called chanes, he said they were of the race of the chanes who were in the interior land and who are called çeritocoçi and that thus among the

Guarani SM4
Chane SF8

/315 cont./

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/fn. 1 cont./ said chanes each pueblo had its name, although all were one race; asked how they came to speak guarany and where he knew the said garçia, he said that the reason he spoke goarany was that in times past, before garçia came from brasil /Brazil/ to the said guaranys, there was a great gathering of said guaranys in the port called ytatyn, in order to go to search for the metal, and that passing through their land at night they came upon their houses and killed many of them and took their women and children and brought them to the said port of ytatyn, and while they were slaves of the said goaranys in the said port, the said garçia passed through there, with whom he and two other brothers went in search of said metal with the said guaranys; asked if he went and traveled with the said Garçia until he returned, he said yes; asked how far the said garçia had gone and where he got the metal that he carried, he said that he had gone as far as the race that they call payçunos, and that the chanes and the said payçunos gave him the said metal and that he had returned from there because he learned that a race called çorocotoquis were having a great gathering against the said garçia and those who went with him, and he said that they returned to get more xrisptianos in order to return with them for the said metal ..." /translated from the Spanish/.

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This testimony and some other indications corroborate Gandía, who in this study gave evidence not only of vast erudition but also great sagacity. There is nevertheless one point on which I do not agree with him. The documents alluding to the migration of the Guarani all speak of it as a recent event whose details were

/315 cont./

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/fn. 1 cont./ still present in everyone's memory. Even if we accept Garcilaso's version and make that event go back to the reign of Tupac Inca Yupanki, it is still no less certain that it could only have taken place in the last decades of the 15th century. It is indeed at this time, according to Balboa, that the emperor Tupac Inca Yupanki would have reigned. (See Nordenskiöld, 6). In this case the first Guarani migration would have preceded García's trip by about 50 years. Why then does Gandía, who himself gives us this figure, consider it more probable that this invasion took place more than a century before the Conquest? When I personally submitted to Mr. Gandía the reservations I had on the subject of the date he was assigning to the establishment of the Guarani at the foot of the Andes, he answered that he had taken as a basis for this evaluation a passage from Lozano (Descripción chrorográfica...) and Mendiburn (Diccionario Histórico Biográfico del Perú...). According to the latter the Inca Yupanki would have died in 1453. I shall reply to this objection by stating that the evidence of Lozano, who was satisfied to copy Garcilaso, has no value; and as for Mendiburn's calculation, I do not grant him any credence.

One single fact remains certain in this controversy: The Guarani had begun their migratory movement toward Peru some years before García's adventurous trip.

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/316/ establishing. Neither was Alejo García's expedition the determining cause of the great migration of which Díaz de Guzmán (p. 29) speaks thus:

"Following these events (García's trip) the Indians of the Province of Paraguay met together with their caciques and

/316 cont./

C G 175 167 decided to make an expedition and go back to the region where Alejo García had gone. When they had summoned many Indians of this province, they started going by bands and tribes. The Indians from below, the ones from the Paraná, followed the
C G 131 175 167 course of the Araguay River, which is, as I have said, the Pilcomayo. These are the Indians who today live on the borders of the Corregimiento de Tarija: the Indians who lived in the region of Asunción entered on the right of the Paraguay River in the direction of Caáguazú. The Indians of Jeruquisaba and Carayazapera who were living higher up on the river left it near San Fernando. The latter are the ones who today are established on the Guapay River /317/ 20 leagues from the city of San Lorenzo, government of Santa Cruz da la Sierra."

G C 175 167 648 In the commentaries of Alvar Nuñez Cabeza de Vaca (Hernández, pp. 299-301), it is a question of another migration which does not appear to have any relation to that of García, which was several years later. I shall quote this passage in its entirety, for it illustrates well certain vicissitudes of this great ethnic movement: Alvar Nuñez Cabeza de Vaca had sent a Spanish detachment to the Xarayes Indians to try to confer, with them as intermediaries, with a group of Guarani Indians who had settled a short time before in their neighborhood. The emissaries failed in their attempt, for Xaray and Guarani were irreconcilable enemies. By way of consolation, the Xaray cacique had put them in touch with a Guarani Indian, married to a Xaray woman, who had lived among them for a long time. "This Indian, who belonged to the Guarani race, had been in the villages of the interior of the lands and /318/ knew the roads which led there." The Guarani was invited to *accompany the Spanish detachment and, interrogated before* the Governor by interpreters, he declared "that he was a Guarani, originally from Itatí /Fig. 1 appears here/ on the Paraguay River: that in his youth his people summoned and made a great levy
C G 721 724 of Indians of all the land and went toward the land and the villages of the interior. He himself had gone there with his father and his relatives to make war on the natives of this region.

[Text continues on p. 41]

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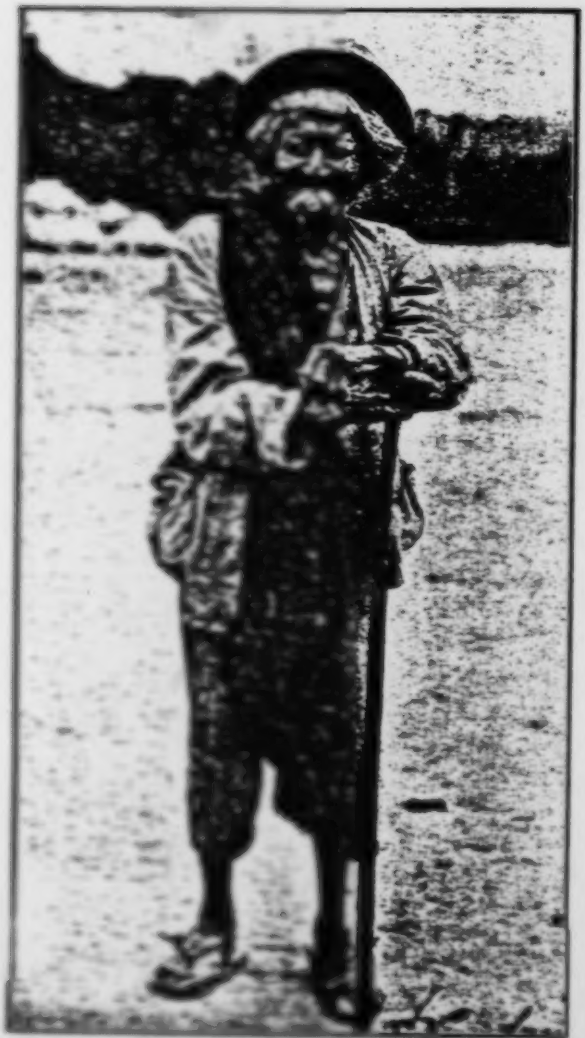

Fig. 1. Old Indian from the Santa Rosa Mission (Photo. by the Reverend Father Honorato Catinari).

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G /319/
175 They took from them the gold and silver plaques and ornaments
167 they had. As soon as they arrived at the first villages
727 they began to make war on the inhabitants and to kill many
726 Indians. Many villages were laid waste and the inhabitants
withdrew toward the interior. Then all the tribes of this land
joined together and marched against his people, put them
to rout, and caused great carnage. The others fled in various
directions and the enemy Indians followed them, barred their
way, and massacred them all. Scarcely 200 were able to
escape out of all those who had left and who were so numerous
that the fields were covered with them. He himself was
among those who escaped. The greatest number of escapees
stayed in the bush through which they had passed and settled
there, for they had not dared retrace their steps for fear that the
Guaxarapo, Guato, and other tribes would exterminate them.
He himself had not wanted to live with them and he left with
those who decided to continue their march. On the way they
were seen by Indians who assailed them at night and killed
them all. He had hidden in the thickness of the copse and,
slipping through the underbrush, he had arrived in the country
of the Xaray, who had taken and adopted him for a long
time. Finally, since their fellow-feelings were mutual,
they gave him a woman of the tribe as a wife. He was asked
C whether he had any recollection of the route he and his people
G had taken to go into the interior. He answered that it was a
175 long time ago that he had taken this route and that then the
167 people of his tribe cleared a passage for themselves by cutting
484 trees and cleaning out the underbrush with which this land was
487 covered. He supposed that since that time brambles and woods
must have overrun the path. He had not gone there any more,
nor had he been to see it again. Nevertheless, it seemed to
him that if he began to follow it, he would be able to continue;
and that this route began near a rounded mountain which
could be seen from Puerto de los Reyes. He was questioned
also on the number of days necessary to reach the first of these
villages. He said that, according to his recollection, one
could get there in five days and great provisions would be found
there, for the Indians are excellent farmers.

/319 cont./

000 C G 175 167 [721] there, for the Indians are excellent farmers. In the course of the war with these populations the Indians of his tribe, he added, destroyed and depopulated numerous villages, but doubtless they had already rebuilt them. He was asked whether there were large rivers and springs along the way. He answered that he saw rivers, but that they did not have much water; however, there were other very deep ones, springs, lagoons, game, deer and tapirs, fruits and honey. He was asked whether at the time his people made war on these tribes C G [721] he had seen any who had silver and gold. He said that in the villages they pillaged there were many silver and gold plaques, /320/ labrets, ear ornaments, bracelets, crowns, axes, small vessels; and that it was all taken away from them when they were put to rout. Those who escaped were able to take along some silver plaques, beads, labrets; but the Guaxarapo stole them when they tried to pass through their territory and killed them. Those who settled in the bush had a few, and he had heard it said that at the present time it was the Xaray who possessed this silver. He declared he had seen the Xaray, when they war upon the Indians, take out silver plaques which they had carried away and plundered in the interior lands."

G C 175 248 [167] Against this bundle of proofs attesting to the recent character of the Guarani migration, what is the value of Garcilaso de la Vega's vague affirmation (Vol. II, pp. 279-281) which some people want to oppose to it? According to this kind narrator, the Inca Yupanki would have undertaken the conquest of the Chiriguano country for the virtuous purpose of converting them to the good natural religion of the Peruvians. The Chiriguano would have been veritable monsters, feeding on human flesh, uniting by chance, living without fire or law, burying the bones of their dead in caves or in the hollows of C 174 172 175 trees. In a word, except for anthropophagy and the mention of the maloca (1), there is nothing in the picture of the

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1. The description Garcilaso (Vol. II, p. 281) gives us of the large house of the Chiriguano is perfectly exact and very

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interesting: "they make a very big dormitory and, within it, as many small rooms as there are residents, and so small that they do not have room for more persons, and it is enough for them, because they do not have furniture, nor do they have wearing apparel and hence they go about naked." /Translated from the Spanish./ These facts agree on every point with those of the Relaciones geográficas, etc. (Vol. II, Plate CIV) and of Lizárraga (Vol. I, p. 250) on the same subject. The Guarani, just like the Tupinamba and other Tupi tribes, lived in maloca, gigantic halls capable of containing more than 150 persons and which often in themselves formed the village. The existence of this type of dwelling among the Chiriguano in the 16th and 17th centuries constitutes new proof for the recent character of their migration. In the 19th century we find them already in possession of the small rectangular house which they still have now and where one single family lives. (See Métraux, 7, p. 51.)

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novelist Garcilaso which might allow one to suppose that he really knew who the Chiriguano were. As for this conquest by the Inca, it would have been barely an attempt at conquest... Garcilaso confuses the Chiriguano with all the tribes of the eastern slopes of the Andes whom he had vaguely heard mentioned. Let us note that he is the only one to attribute this expedition to the Inca Yupanki, while the other chroniclers, better informed, are satisfied to say that the Inca Yupanki made an expedition against the Antis, probably around Cuzco. Unfortunately the vogue this pleasant writer enjoyed at a time when the history of America was still in limbo bluffs some modern critics into believing him, and they go so far as to prefer one of his unwarranted affirmations to the serious /321/ and precise evidence of chroniclers who got their information at first hand and from reliable sources.

Guarani SM4
Guarayu SF11

/331 cont./

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In 1550 during the expedition made by Domingo Martínez de Irala from Paraguay to the slopes of the Andes, 150 Guarani Indians out of those he had with him as auxiliary troops mutinied when they learned that they were in the vicinity of Chiriguano Indians "who are of the same nation." They deserted in order to go and join them. In 1540 the same thing had already happened (Díaz de Guzmán, p. 143).

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The Guarayú and the Pauserna are brothers of the Chiriguano and, like them, came from Paraguay at a recent date to settle in eastern Bolivia. Nordenskiöld (?), without giving any proof, correlates their migration with that of the Chiriguano and fixes its date at the beginning of the 16th century. The Guarayú would have been none other than the descendants of those Guarani who, having left northern Paraguay, would have gone obliquely toward the northwest in their trek toward the setting sun. I myself shared this opinion for a long time, until my attention was attracted by an episode in the history of the conquest which obliged me to recognize my error, at the same time permitting me to solve the problem of the origin of the Guarayú.

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The Itatin, known nowadays by the names Guarayú and Pauserna, actually came from Itatin province in Paraguay (1); but it is not a question of a migration in the usually understood sense, and their establishment in eastern Bolivia was later than that of the Chiriguano.

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Ñuflo de Chaves, going from Santa Cruz de la Sierra to Asunción in 1563, stopped among the Itatin and plotted with the chiefs of this tribe to transplant the Indians of this region beyond Paraguay. The project was carried out the following year when the Governor of Paraguay, Vergara, and Ñuflo de Chaves organized the famous exodus toward Peru. While passing through the country of the Itatin, Ñuflo de Chaves raised

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1. The former province of Itatí in Paraguay extended to the south of the Apa River, formerly the Corrientes River.

Guarayu SF11
Guarani SM4

/321 cont./

Gu 175 167 648 2,000 to 3,000 Indians "who left their fatherland to go to settle in foreign territory.... When these Indians arrived at a place 30 leagues from Santa Cruz de la Sierra, they settled there and called it Itatin, thus alluding to their native province. They stayed there and immediately began to sow." (Díaz de Guzmán, p. 202)

Some years later these same Itatin assassinated Nufrio de Chaves, who had come to their villages to accompany Felipe de Carceres and the Bishop of Asunción, Francisco Pedro de la Torre, who was going back to Paraguay. It is strange that these Indians killed the man who had made them change their fatherland and found a new nation between Xaray /322/ and Santa Cruz. Some say that this murder had revenge as its motive; others, the violence of Nufrio de Chaves, who addressed severe admonitions to the caciques. However that may be, the Spanish avenged the death of this conquistador by massacring guilty and innocent with their usual ferocity when a weaker people was concerned. On the return trip, Carceres and his band had to fight the Itatin of Paraguay, who harassed him and often put them in a difficult situation. (See Díaz de Guzmán, pp. 207-215; Groussac, pp. 294-314 and Gandía, 2, pp. 136-140.)

G [169] [131] It was the Spanish then who transplanted the Itatin to Bolivia. It is not impossible that several Guarani groups were already established in the country, having come either from Paraguay or from regions occupied by the Chiriguano.

Gu [131] The recent date of the settlement of the Itatin between the San Miguel River and the Blanco River explains a passage from an Annua littera (see Métraux, 5, p. 918) of 1589 where allusion is made to the pain of a woman who dies without avenging herself for the slap she had received from a Spaniard 20 years before in Paraguay. That takes us back more or less to the year of Nufrio de Chaves' trip to Peru, thus to 1564. If the Itatin followed the Spaniards willingly, it is because the previous migrations of the Guarani had familiarized them with these regions and made them consider such an expedition as an easy and normal thing. By accompanying the Spaniards they were imitating their neighbors and going near their relatives.

Chane SF8
Guarayu SF11
Guarani SM4
Arawakan Indians SR6

Gy 175 642 /322 cont./

Thus, it is in 1564 that the Guarayú nation was formed.

G 175 648 167 In emigrating to the foot of the Andes, the Guarani had to win their present territory from populations who, like them, had formerly come from the basin of the great rivers of tropical America.

Ce [101] In spite of the similarity of their original habitats, the Indians dispossessed by the Guarani were superior to them in civilization. The Chiriguano even today scornfully style them tapii, that is, "enemies," but they call themselves Chané, and it is by this name that they appear in history from the first half of the 16th century.

Ce 101 241 323 197 The Chané, hard-working farmers and past masters in the art of pottery, belong to the great Arawak linguistic family.

A 181 174 The role of the Arawak in the development of civilization in South America has been considerable. Unfortunately, lacking any work of synthesis (1), it is still difficult to appreciate the true value of /323/ the civilizing work they accomplished in swarming over a great part of the continent. It is possible, if not certain, that they were propagators of cultural elements borrowed from the peoples of Central America rather than original creators. Nevertheless, wherever they settled they formed centers of civilization whose radiance is undeniable. In the whole region east of the Andes where ceramics of fine quality flourished or still flourish, one can

A 181 172 suspect the existence or influence of an Arawak tribe. Is proof wanted? On the banks of the Amazon, from the mouth to the tributaries of its upper course, one finds at each step remains of a pottery with great richness of ornamentation and varied forms; wherever the spade has brought these remains to light, history attests to the presence, present or past, of an

A [114] 1. Max Schmidt's thesis (1) on the Arawak contains some interesting facts. It should be redone because its documentation is completely insufficient. Max Schmidt took almost no notice of the old literature.

Arawakan Indians SR6
Chane SF8

A /323 cont./
181 Arawak tribe. The culture revealed by the excavations in the
192 Mounds of eastern Bolivia (Mojos) is clearly Arawak; and it
would be unjust to forget that the Taino of Cuba and the
Antilles were also relatives of our Chané, whose name is less
illustrious. To this list are joined almost all the archeological
remains of Guiana, the modern ceramics of this same region,
those of the upper Amazon and of the upper Xingú, all three of
which have as artisans or as inspirers the Arawak Indians. There
is nothing impossible in the idea that the curious zoomorphic
appliques of the lower Paraná may be as many remains of an
ancient Arawak or "Arawakized" population (see Métraux, 4,
pp. 181-183).

A According to a hypothesis developed by Max Schmidt (1),
174 the migration of the tribes of Arawak speech probably never
433 had the violent and rapid character of that of the Tupi, for
167 example. The Arawak would have advanced slowly in pro-
241 portion to their economic needs. Hoe farmers, they constantly
311 had to have new lands to cultivate. By ceaselessly clearing
fields which they abandoned once they were worn out, they
ended up by covering that vast geographic area which goes from
Guiana to the Bolivian Andes.

A In each region the passing through or the settling of the
167 Arawak was a blessing. The Arawak brought with them if not
174 agriculture at least the knowledge of new edible plants, weaving,
648 and, as we have said, ceramics of superior type. Unfortunately
A for them, the Arawak, Indians who were generally not bellicose,
[181] were in many a place made subject to crude but more warlike
populations. In the Antilles it was the Karib /Carib/ who subju-
gated or drove them back; in the Guianas, again the Karib; the
Guaikurú /Guaícuru/ in the northern Chaco; and finally, at
the foot of the Andes, the Chiriguano.

Ce The Chané belong to the Moxo-Mbaure branch of the
197 Arawak family. They separated from the other tribes of this
174 subgroup at an unknown date, and, abandoning the basin of
167 the Mamoré and the Guaporé, they /324/ slipped along the
Andes as far as the northern Chaco, stopping only south of the
000 Pilcomayo. The extreme limit reached by this migratory wave

1: Métraux--48 E-5 (1929) 1930 SF10 Chiriguano
Chane SF8
Guana SK7

Ce 167 361 /324 cont./ The extreme limit reached by the migratory wave is marked by the Chané villages of the Itiyuro River and by those of the Aguaray (Salta Province, Argentine Republic). Describing an immense arc of a circle above the northern Chaco, part of the emigrant tribes streamed out toward Paraguay and Brazil.

Ce Ga 101 105 "The Arawak Indians of the Chaco, whom linguists have recognized as closely related to the other Indians of this family, are known in the 18th century by the name of Chané and Guaná. The appellation Guaná has been reserved for the ensemble of the eastern Arawak groups and that of Chané for the western tribes. Like the Chiriguano, they make a very clear contrast with the other small tribes of the Chaco, and this antithesis is so Ce Ga [181] strong that at first sight they look like an element that was implanted there. They are sedentary and pacific; and insofar as they have not been forced to abandon their ancestral customs, they live in villages solidly defended by palisades and devote themselves to the intensive cultivation of the soil. They know how to spin cotton and, like all the Arawak peoples, are remarkable potters. They do not practice infanticide and are not polygamous. The Jesuits hold them in high esteem, for they do not have idols.

Ce Ga 648 [131] "The two Arawak tribes of the Chaco, the Chané in the west and the Guaná in the east, used to live, the first in the interior of Chiriguano territory and the others in the domain of the Mbayá. They were both subject to these Indians and they depended on them entirely. This state of subjection varied according to the place. The condition of the Chané with relation to the Chiriguano was that of slaves to masters, of prisoners to conquerors. Among the Mbayá, the relations between the Guaná and their neighbors did not have so clear-cut, so brutal a nature.

"The Guaná appear sometimes as vassals and protégés of the Ga [621] Mbayá, sometimes as their allies. They are grouped into little closed communities, nearly independent. The bellicose Mbayá had the custom of taking a wife preferably from among their Arawak or Chamakoko subjects, and this explains the fact that the Mbayá wives and children spoke a different language from that of their husbands or fathers. Schmidel already

/324 cont./

Ce cites a people of the Zchennte (Chané) in whom by reason of
Ga 648 their geographic situation we must see the Chané-Guaná:
'They are vassals and subjects of the Mayaiess (Mbayá) as
with us the peasants are subject to their lords.' We also
have no trouble in recognizing the Chané in the Queanaes
(Guaná) whom Alcide d'Orbigny mentions, according to an
old account, as having been subjugated by their neighbors the
C Chiriguano and obliged by them to cultivate their fields. In
Ce the 18th century the Chané, as prisoners of war of the
175 Chiriguano, had been quartered /Plate V appears here/ /325/
648 like slaves in villages called Chané after them. When Lozano
567 727 declares that the Chiriguano call their slaves Chané, an ethnic
value must be given to this phrase. The state of subjection of
the Chané in relation to the Chiriguano is explained in the
linguistic sphere by the name which the first used to give to
the second: cheya, 'my master,' the Chané used to say when
addressing the Chiriguano, and the latter called the Chané
tapii, 'my slave.'

Ce "The little we know about the Chané who live in the
175 lost regions of the northern Chaco is connected exclusively
799 with the activity of the Jesuit and Franciscan missionaries of
the Collège de Tarija. The first evangelized the Chané in
C the 17th century at the same time as the Chiriguano; and in
[799] 1714 they formed with them a doctrina /Christianized Indian
village/ in the vicinity of Santa Cruz. It was called San Juan
de los Porongos and in 1767 was under the authority of a parish
C priest. It was only with great difficulty that the Chané could
Ce be assembled, in 1767 and 1789, into the two missions of Asero
175 and Iti. We learn from a report by Father Pedro Bartolomé
162 addressed to Francisco Aguirre that the Filipili mission in 1789
797 was made up of Chané Indians whose racial brothers were living
mingled with the Chiriguano on the borders of Chuquisaca and
Santa Cruz. Viedma, who visited the missions in 1788, found
C in the villages of the Parapití Chiriguano and Chané who were
Ce living together, united under the authority of the Franciscan
175 missionaries. The activity of the missionaries among the Chané
648 797 naturally was to have as a consequence a rupture of the bonds

[Text Continues on P. 51]

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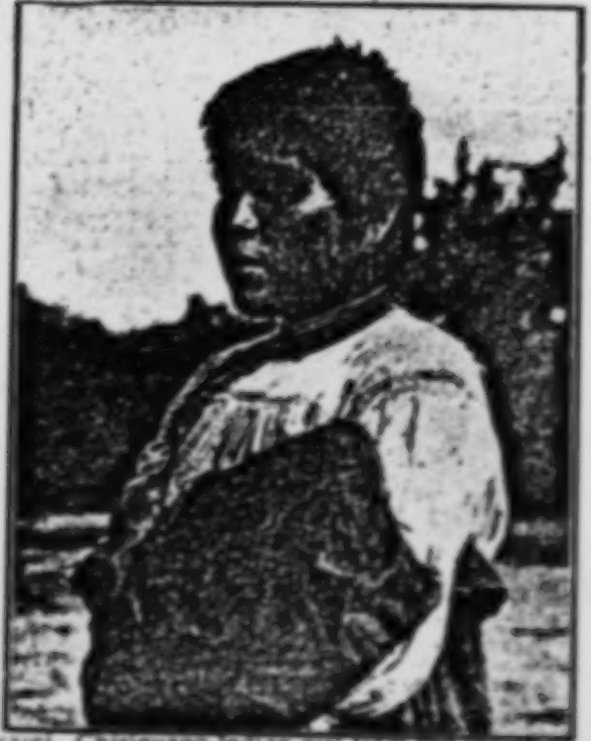
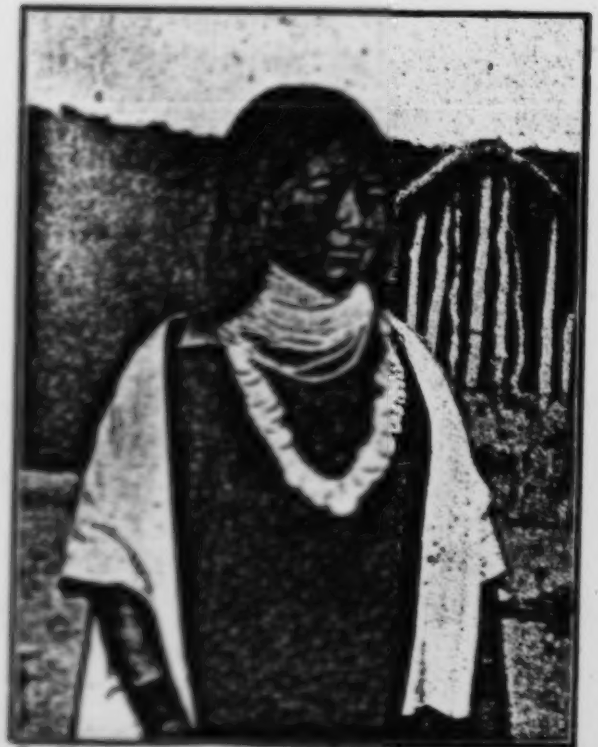
Plate V



1. Iwawasei. Chiriguano Indian girl from the region of Caruruti (near the middle course of the Parapití River). Her hair is cut short as a sign of mourning for the death of an aunt. (Photo. A. M.)



2. Chiriguano Indian girl from the village of Ibopeyti (upper Pilcomayo). She has put on her festival clothes and sports her most beautiful necklaces. (On her chest, necklace of silver coins.) (Photo. A. M.)

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/325 cont./
of subjection which attached them to the Chiriguano: as a matter of fact, in the 18th century great social transformations took place and little by little they tried to free themselves from their servitude."

There is little to add to this account by Kersten (pp. 69-71), so clear and exact. However, I should like to complete it by quoting some texts of the 16th century which illuminate the drama of which the Chané had been the victims since the end of the 15th century.

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The war of extermination made by the Guarani on the Chané dates from their first migrations to the country of metal. Thus it was that the Chané who, as we have seen, recounted to Irala the great exodus of the Guarani of Itatí before García's expedition, was taken along by the latter as a slave on the banks of the Paraguay. The Guarani, passing through his country at night, had attacked the homes of his people and taken women and children as captives. Later, this Chané was a member of García's expedition. Upon the death of the latter, the Guarani got ready to kill him to devour him as they had done with his companions and several women. He was able to escape and take refuge among the Guaxarapo (Relación de Domingo Martinez de Irala, pp. 347-348).

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In an account that a Guarani gave to the same Irala about the expedition in which he had taken part to go to the country of metal, he speaks of the /326/ Chané exactly as the Chiriguano will do a century later: "They fell," says he, "on the houses of slave and enemy Indians." This term "slaves" applied to the Chané characterizes well the relations the Chiriguano had with them until not long ago (Relación de Domingo Martinez de Irala, p. 330). In the middle of the interview a Chané challenged our Guarani to ask him whether he had been present when the people of Itatí destroyed his tribe. When the Guarani inquired who he was, he replied: "I am the chief of the slaves of whom you speak, and, taken prisoner at the time you say, I lived with these Guarani until the moment when I went away and came here. The land you speak of is mine. Why do you not tell the truth to the Christians who are asking for nothing else but the way to

Chane SF8
Guarani SMY

/326 cont./

C G go in search of metal? The aforesaid Indian answered: "They
175 do not understand that I am only telling them that they can go to
567 the country of the Chané in nine days." While they were
72 speaking with this Indian, the aforesaid Cheroçe, chief of the
Ce Chané, was conversing with a woman of his tribe who as a
175 girl had been kidnapped by these Indians whose chief had taken
648 her as his wife. She said that it was correct that from the last
houses of the aforesaid Guarani only four days were required to
go as far as Ytapua and that from there, according to what
Cheroçe claimed, one could go to his country in three days.
He knew the way very well, for he had been brought up over there,
but up to the present he had had no news of his country. (Relación de Domingo Martinez de Irala, p. 350.)

These facts prove that well before García's adventure the Guarani raided the Chané territory and were already beginning to make slaves of its inhabitants.

C G "When Guarani bands arrived on the slopes of the Andes,
175 each one tried to occupy as strong a position as possible on the
567 most craggy points. From there they began to make pitiless war
on the natives of the region, treating them with such cruelty
72 that they spared nobody and made their fodder of the unfortunates
they captured. They made themselves so fearsome that numerous villages submitted to them without violence. With the slaves they took to serve them and with all the women by whom they had children they populated these frontiers, each one choosing the region which seemed best to him. These Indians are the ones we call Chiriguana in Peru today; they originate from the Guarani. They never went out from this country, either because of the great hardships and risks of the road or in order to keep in their power this land which they found consonant with their nature and taste. It is indeed very fertile, with large and marvelous valleys which are warm rather than cold; and it is crossed by deep rivers coming from the neighboring province of Charcas. In possession of this land, they
G made numerous /327/ warlike expeditions in it, ruining the
[266] plains to the north, the south, and the east. They killed more
than 100,000 Indians. In the beginning they used to eat them
[439] in the feasts and drinking bouts which they celebrated, but

C /327 cont./
G they have not done it any more for some years and sell them
175 to the Spanish for the shoddy goods the latter give them in
567 exchange. Indeed, they consider it more profitable to sell
772 them for objects they need than to eat them. Their cupidity
[266] is such that there is no year when they do not go out to make
[439] war in the plains, with great trouble and at the risk of their
C lives, solely to procure prisoners. Among these Indians there
G 175 are some individuals so rich that in addition to clothes of
556 cloth and silk they have silver dishes, a service which costs as
721 much as 500 marcs. Without counting a great number of horses
727 saddled and bridled, with good harnesses, and all kinds of
weapons which they owe to the thefts and plundering they do
in the course of these unjust and pernicious wars. Up to the
present no one has been able to bridle their cruelty or stop the
C disorder and insolence of these people. They have committed
G many offenses and lacked respect for the royal Power, taking up
175 arms against Francisco de Toledo, who was viceroy of this
648 kingdom. Besides, they have killed and stolen from the Spanish
721 and have inflicted outrages of all kinds on them, depopulating
villages, killing and pillaging the fields and farms of the
vassals of His Majesty who live on these frontiers of Tarija,
C Paspaya, Pilaya, Tomina, and Misque, and the government of
Ce Santa-Cruz de la Sierra." (Díaz de Guzmán, pp. 30-31.)

175 "The Chiriguana (sic) live near these valleys (Tomina and
101 181 Lagunilla) in warm mountains covered with trees where horses
648 can scarcely walk. They are not natives of this country but
C [361] foreigners come from Río de la Plata. The language is the
[199] same and does not differ from it in any way... The Indians
Ce toward whom they are most hostile inhabit a province behind
[131] these mountains, a very flat land lacking water, which is
called Llano de Manso or the province of the Chané. These
Chané are inoffensive people but of good tendencies, of a
C more congenial appearance and a better nature than the
175 Chiriguana. The latter have eaten more than 60,000
[illegible] of them, and I do not believe I am saying very many, for these
[illegible] plains were very heavily populated. At present there are only a
[illegible] few Indians, and as they have no one to defend them, these
[illegible]
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[illegible]

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175 /327 cont./
727 brutal people butcher them. The Chané are so subject to the
567 Chiriguana that it is enough for them to see a Chiriguana to sit
266 down without resisting, allowing the Chiriguana to do what they
648 like with them. The Chiriguana take them along like flocks of
CE sheep. They eat the ones they want and use the others for work
648 in their houses and fields. If they want to eat one, they only
175 tell him to go and wash in the river and he does it without talking back. He comes back naked; the Chiriguana command their children to take bows and arrows, and the poor Chané tries /328/ to escape the arrows without, however, daring to flee from the spot until he dies riddled with arrows, to the
C
[252] great joy of all who look at him. They cut him in pieces and eat him either grilled or roasted, with corn and much ají
C
CE /peppers/. For war they use Chané who they think are brave
[726] and robust. They treat them according to their barbaric customs and put them in front of themselves; if they do not fight well, they kill them with arrow shots from behind." (Lizarraga. Vol. I. pp. 259-260.)

C Last year, going from Cuevo to Iguembé, I had taken a
173 Chiriguano guide who spoke Spanish fairly well and who had
721 lived among the Chané in childhood. He told me in his own
727 way about these wars of former days. His involved narrative
648 recalls that of the Spanish monk. Later I sojourned for some
CE time among the Chané who in their turn alluded to their fights
648 with the Chiriguano and to the cannibalistic customs of the
173 latter. "The Tapui are not the Ava. In times past they used to
186 fight against the Ava." The Ava used to take the women and
C
[illegible] keep them in captivity. They used to marry the captives. From the sons of the Ava issued the Tapui, they are sons of the women they carried away. The Chané are sons of the captives. When the Chané talk together, it is with words that one does not understand. Formerly the Karai (Whites) used to fight the Ava around Cochabamba. The Karai pursued them to the lower part and left them in Paraguay. The Paraguayans are
C
[266] sons of the ancient Ava. In olden days the Ava used to eat the Tapuí when they made war against them. "The Ava used to eat us," the Chané would say, "and that is why we detest them."

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[illegible]
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/328 cont./

The Chané confirmed to me the sayings of my informant and assured me that the Chiriguano used to eat them in times past (1).

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1. Matienzo (pp. 166-167) expresses himself on the subject of the Chiriguano and the Chané in almost the same words as Lizárraga: "In the land there is a province of the Charcas and close to the city there are some immigrant Indians who are said to be chiriguanaes, warlike people, very cruel, indomitable, and they eat human flesh, live in the cordilleras, have no occupation other than fighting and killing and eating Indians and using them as slaves; they go out at night to plunder on the plains which are near the cordilleras, where some Indians subject to their sovereignty live, and they seize them by the thousand and two thousands and eat them and have others to fatten for eating, and others to serve as slaves; these Indians, out of fear of the chiriguanaes, fled from their land, which had some very beautiful and fertile valleys, thirty and forty leagues from the city of the Plata, and went to some plains and deserts which were customarily deserted because of the lack of water; they live entirely on yucas and camoons, are more than eighty thousand, etc." /translated from the Spanish/. The deserts under discussion here and where the Chané took refuge are none other than those of the lower Parapití where numerous Chané now live, in spite of the poverty of this arid region.

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It is not at all surprising that the Chiriguano have kept alive the memory of their struggles with the Chané. These ended only in the last years of the 18th century. In 1745 we see the

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C CE 175 648 /328 cont./
Chané of Santa Cruz province coming to ask
for aid and protection from the Chiriguano who
CE [1721] were tracking them down; in 1798 the Chané
of the Itiyuro were still making incursions
against the Chiriguano of the region of Itáu
and destroyed that mission almost completely.
(See Corrado, pp. 98 and 225; Tamajuncosa,
p. 211.)

Ce /329/ The Chané tribe did not succumb to these hecatombs
648 or to slavery. It was able to maintain itself on two points of
178 its former territory: on the Itiyuro and the Parapití. Several
131 villages whose density is rather great still exist there. The
CE Chané of the Itiyuro still number about 1,500. They all live
[162] in Argentine territory in the province of Salta. I do not have
[101] any statistics for the Chané population of the lower Parapití,
but I know these Indians are still numerous there.

CE 197 Today the Chané are not distinguishable from the
[101] Chiriguano by their material culture or their language. They
C speak Guarani, but use certain locutions and certain words which
[197] the Chiriguano say they do not understand and which are perhaps
CE so many vestiges of their ancient Arawak speech. They have
[198] kept the latter as a secret language. Nordenskiöld (2, p. 157)
was able to collect a short vocabulary of it among the Chané
of the Parapití. As was supposed a priori, it is certainly an
Arawak dialect closely related to Moxo-Mbaure.

Ce The modern Chané are no longer slaves, but their early
648 condition is still manifested in their relations with their former
186 masters. The Chiriguano always regard them with a certain
C scorn and a protective air, to which the Chané respond with
[186] open animosity. A Chiriguano would feel offended to be called
C Chané, and a Chané Chiriguano. The name by which the
[101] Chiriguano designate the Chané is always Tapii.

CE Even if historic traditions or ethnic facts were not in agree-
172 ment to prove the existence in the western Chaco of an Arawak
167 population, archeology alone would suffice to teach it to us. At
Tarupayu, Nordenskiöld (5, pp. 40-41) brought to light pottery

Chane SF8
Guarani SM4

/329 cont./

Ce 172 167 [177] clearly Arawak by its technique and many a detail of its structure. It dates from an epoch when the Chané, newly come to the foot of the Andes, had not yet undergone the Andean influence of the populations of the Bolivian south (Chicha, Atacama, etc.).

C G 181 171 When they arrived among the Chané, the Guarani had a civilization nearly identical with that of their racial brothers, the Tupinamba of the Brazilian coast, whose ethnography is so familiar to us, thanks to the old French and Portuguese chronicles. They differed little from their present-day cousins, the Kainguá /Caingua/ of Brazil and Paraguay, who are independent but impoverished Guarani.

C G 177 181 Upon contact with the superior Chané civilization, the Guarani adopted it as it was, introducing, however, some cultural elements of Paraguayan origin. From this fusion of the two nations was /330/ formed a center of acculturation which we can designate as Chané-Chiriguano civilization.

C 177 It is through the medium of the Chané that so many aspects of Andean civilization still characterize Chiriguano culture. For how could we otherwise explain so strong an effect of Andean civilization on the Chiriguano at the time when that civilization was failing and disappearing, at least partially?

Ce 177 178 The Chané, on the other hand, established for centuries near the Chicha and other Indians of the south of mountainous Bolivia, have, thanks to their trade relations, submitted to the attractions of the Andean civilization which has infiltrated among them, as among the other tribes of the Chaco, in the form of toilet objects, jewels, artistic motifs, games, words, and vices. It is these multiple contributions which give the Chané culture this Andean appearance which strikes every ethnographer used to the peoples of Brazil. But, having come from the great forests of the Amazon basin, these "Quichuaized /Quechuaized/" Arawak have faithfully kept until today furniture and utensils which betray this origin and tie them directly to their faraway relatives of the Guianas. The Chané civilization was and still is a mixed civilization formed of elements from different sources and often of opposing nature.

Chané SF8
Guarani SM4

/330 cont./

CG 177 The Chiriguano adopted this civilization of a superior type with all the more ease by reason of the numerous affinities it offered with their own. The whole Amazonian and Guianan side of the Chané civilization was composed of industries, techniques, and practices with which the Chiriguano, having come from the tropical regions of America, from a country of great forests and rivers, were already acquainted in part. Thus, for example, the Guarani, upon arriving among the Chané, found again the hammocks, grain sieves, mortars, baskets, and weapons to which they were accustomed.

CG CE 177 The contribution of the Chané consisted of the very cultural elements they had received from the Andean peoples, that is, clothing (camisetas, headband, etc.), the liking for silver ornaments, some artistic motifs, certain pottery forms, etc., things which were scarcely beginning to filter into Paraguay. The influence of the Chané was decisive in the sphere of pottery. CE [323]

CG 177 CE 323 [161] CE 178 323 177 The civilizing action of the Chané upon the Chiriguano had as agent the Chané women whom the Chiriguano captured and married. The Guarani had certainly taken along with them only a small number of girls. They themselves were few in number at the beginning, 4,000 according to Lizárraga (Vol. 1, p. 260). In uniting with the Chané women whom they carried off by the thousands, they renewed with their blood all the feminine aspects of their industry. It is the women, for example, who make /331/ the pottery: a man would not be able to engage in it without losing prestige. So we see the pottery of the Guarani undergo important modifications and change completely. Today pottery is their glory: and of their ancient ceramics they have kept only the humble pots or the brewing vats for chicha. In spite of their decline the Chané have maintained their traditional superiority in this art, and they continue to produce vessels which, if they are not comparable to those of the past, are often very beautiful.

Chané SF6
Guarani SM4

Ce /301 cont./

178 The pernicious and corruptive influence of the white
439 men, which makes so many ravages among the poor Chané, has
323 at least spared their pottery industry. They still manufacture
[177] considerable quantities of vessels which they sell to the other Indians and to the whites. As clever business men they complied with the taste of their new clients, and the motifs with which they decorate the pieces they export are as hideous and gaudy as the ones which ornament half-breed or creole textile fabrics or baskets.

C Moreover, we can understand historically certain phases
326 of the transformation of the culture of the Guarani when they
179 mixed with the Chané. The ancient Guarani used to live in
178 the large house or maloca, that is, in gigantic huts sheltering
242 several families. Having emigrated to the foot of the Andes,
596 they kept until well into the 17th century a type of habitation which corresponded to a particular social organization (the large maternal and undivided family). In the 19th century we
C see them living in huts similar to the ones they still have today,
179 intended to house only one family. In the same way one can
178 witness the disappearance of cannibalism, which in the 19th
222 century is no more than a memory among the Chiriguano. Certain traces of it have survived up to our day.

C Thus these pages justify the assertions of the preface.
19 With the Chiriguano we are dealing with a nation of recent formation whose civilization is a composite of Guarani, Arawak, and especially Andean elements. The geographic area inhabited by the Chiriguano can be divided into as many diverse zones of acculturation as America has. It has brought about, not the joining of these cultures, but their fusion.

Résumé

C
106 The Chiriguano belong to the Tupi-Guarani linguistic
175 family.

C They emigrated from Paraguay to the foot of the Andes in
[169] the last quarter of the 15th century and the first half of the 16th.

C 185 [illegible]

[331 cont.]

This migration had as its motive power the attraction which the metal riches of the Inca Empire exerted on the Guarani, and perhaps also certain mystical factors (the myth of the "Land without affliction").

[332] The famous expedition of García is probably only an episode in this great migration...

CE [illegible]

At the foot of the Andes the Guarani found a population of Arawak speech, the Chané, whose civilization had felt strongly the influence of the tribes of southern Bolivia subject to the Inca.

C [illegible]

The Guarani exterminated part of the Chané, reduced the others to slavery, and took Chané women as wives.

The Chiriguano nation issued from this ethnic mixture.

C [illegible]

From a cultural point of view, the Chané exerted a decisive influence on the Chiriguano and it is through them that today certain aspects of the Inca civilization are continued by the Chiriguano.

CE [illegible]

On their part the Chané adopted the language of their conquerors, keeping for a long time their Arawak speech as a secret language.

C [illegible] 131

Situation of the Chiriguano in the 18th Century and Today

In the 18th century the territory of the Chiriguano can be defined as follows: "According to Jolis and Hervas, their domain extended from Tarija to the east a distance of 50 leagues (250 kilometers), and from north to south, 100 leagues (500 kilometers). Their frontiers were the following: In the north they reached 17° south latitude and advanced as far as the Jesuit missions of Chiquitos. In the south they reached 22° south latitude. In the region of Salinas, Itáu, and the upper Pilcomayo, they had as neighbors the Matako-Mataguayo and the Toba. Toward the west they had establishments as far as Chuchas, Pilaya, Laguna, and Valle Grande. Permanent

C [101]
C [361]

195 /332 cont./ Permanent?
[131] villages were there under the command of hereditary caciques.
[361] The middle course of the Parapiti formed their boundary to
[62] the east. In the 18th century the Chiriguano constituted the
most important and remarkable nation of the western Chaco.
161 The statistics concerning them vary a great deal: the figures,
given with their usual exaggerations, vary between 41,000 and
[114] 15,000 warriors. The Chané are included in this number,
which completely removes all value from these statistics."
(Kersten, pp. 68-69.)

131 Today the boundaries of the Chiriguano have stayed
[178] about the same. But even though they inhabit a territory
whose extent has varied little, their situation has none the less
[162] undergone great changes. Several thousand half-breeds from
Tarija, Santa Cruz, and Chuquisaca have settled inside this area
that we have defined. A Chiriguano frontier no longer exists,
but only remains of villages and small groups which still mark
161 the former extent of the tribe. On the other hand, the num-
131 ber of Chiriguano has diminished terribly and is diminishing
each day, so that a few years from now the true habitat /333/
of the Chiriguano will be contained between the Parapiti and
the Pilcomayo and will be reduced to the former Franciscan
missions and to several valleys of the Precordillera, such as
those of Caipipendi and Igüembé (1).

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1. Some historians not well informed about the ethnic geography of South America have claimed that in the 18th century the Chiriguano lived well beyond the boundaries I have indicated. One of them (Dr. Fulgencio Moreno) went so far in this direction that he attributes to the Chiriguano the possession of a large part of northwestern Argentina and pushes this fancy to the point of locating them almost as far as in the province of Córdoba. Mr. Coni in an excellent monograph, documents in hand, has done good justice to these bold allegations and has demonstrated that these hypotheses were without foundation.

Guarani SM4
Tupi Guarani SL6

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The archaeological arguments of those who believe in a vast extension of the Guarani into Argentina rest on the occurrence of burials of adults in urns in the provinces of Salta and Jujuy. Recently I conducted excavations in several pre-Hispanic cemeteries of this region (Candelaria department, Salta prov.), and I was able to satisfy myself that the peoples who left us these great necropolises had nothing in common with the Chiriguano from a cultural and anthropological point of view. The funerary urns I brought to light are entirely different from those of the ancient Guarani, and the funerary furnishings include no piece which could be attributed either closely or distantly to the Guarani.

T-G
[764]

Burials of adults in urns is not in any way characteristic of the culture of the Tupi-Guarani Indians, and, I might say, even the opposite. Already in 1905 Outes (1) in a very well-documented monograph had proved that the cemeteries of Rosario de Lerma and San Pedro de Jujuy, which Boman (1) considered as Guarani, in no way constituted proofs of a Guarani migration into northwestern Argentina. Nordenskiöld (11, pp. 106-109) and myself (Métraux, 5, pp. 271-278) have resumed study of this question, and our results entirely confirm those of Outes (1). Therefore, as much from the historic as from the ethnographic point of view, boundaries other than the ones I have indicated could not be assigned to the ancient Chiriguano.

/233 cont./

Chapter II

Agriculture

241 The Chiriguano, like the Guarani and the Chané, their ancestors, are excellent farmers, and the working of the soil represents their principal occupation and their great concern. 243 [273] For them corn is of prime importance; it constitutes the basis of their diet, for it enters into the preparation of most of their dishes and in addition gives them their preferred drink, chicha or kawi.

[132] [134] The sandy lands of the western Chaco and its climate, hot and dry a great part of the year, but also rainy during the summer months, seem to be particularly suitable for this grain. I have never seen such beautiful fields of corn anywhere. The ears are large, well filled out /234/ with kernels, and extremely tasty. The Bolivian half-breeds and settlers who are coming in greater and greater numbers to take the place of the Indians devote themselves like them to the growing of corn, which, with cattle-raising, is their main resource.

114 243 [241] My trip to the Chaco, which took place from the month of February to the month of June, did not give me a chance to be present at the sowing which is done at the beginning of the rainy season. For many details I shall therefore be forced to [129] refer to Corrado (pp. 42 and 44), Campana (pp. 86-90), Nordenskiöld (I, pp. 101-106, and II, pp. 73-76), to Nino (pp. 227-241), and Rosen (I, p. 210).

241 243 When a Chiriguano wishes to cultivate a new piece of ground for himself and his family, he scours the environs of his village looking for a spot which may suit him and which is, in addition, easily irrigable. This condition is generally fulfilled by the lands at the foot of a hill or rising ground. The rain water which pours down there assures them of fertility.

/336 cont./

241 Before taking possession of a new plot of land the
423 Chiriguano is always careful to make sure that there is no trace
243 of previous cultivation. Otherwise the former owner or his
[249] descendants would have the right to lodge a complaint against him to the chief of the village.

[824] The Chiriguano makes known his new property right by planting any edible plant before the rainy season, for example, the large squash ([illegible]) which spreads everywhere and is not smothered by the underbrush. He can equally well insure possession of the chosen terrain by knocking down the underbrush all around and making big gashes in the trees (1).

[171] 1. Compare this manner of insuring property rights with the method observed by the Caxinawa /Cashinawa/ in the same circumstances: "I saw (an Indian is speaking) rising ground which is suitable for a planting. I am going to make a planting for this summer. I broke many branches on this hill to mark this excellent place. No one can make his clearing on this hill. This hill is excellent; do not go there to make your planting." (Abreu, p. 69.)

241 In the middle of the dry season, say, in August, the
243 Indian, with a long stick sharp on both sides, fells the underbrush which encumbers his future field and sets fire to it. This operation has the further advantage of fertilizing the soil, thanks to the bed of ashes, which is a rather good fertilizer.

The cultivated fields are usually cleaned up after the harvest.
[234] The domestic animals, who feed there with little expense, are first let out there, and then the fields are set afire.

[221] Sowing takes place in the month of November when the first
[821] rainstorms have softened the soil. This time is announced by the appearance of the Pleiades ([illegible]) above the horizon early in the morning.

/334 cont./

241 The Chiriguano who is getting ready to sow takes care
243 to hoe his field and to rid it of all weeds. For this he uses /335/ a shovel, which I shall describe, in part from Campana
243 (p. 98), not having seen this instrument whole.

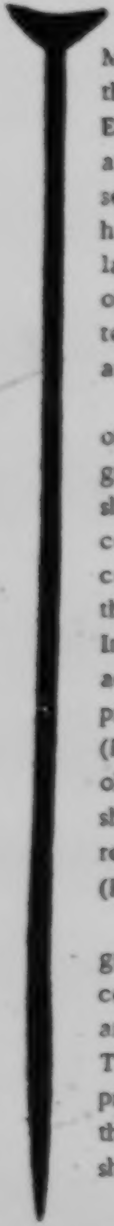
241 The shovels (sipe of the Chiriguano, even not so long
412 ago, were entirely of wood, preferably wood of the urundei
[824] (Astronium urundeuva F. Allemao) or of the palm siripa. Although narrower and longer, they resembled those of our bakers. The edges were straight, almost parallel, and only the cutting edge was slightly rounded at the sides. Toward the top they ended in a point, a
[824] kind of embryonic handle, which was lengthened by a stick to which it was attached with ties made of churqui (Nilotica farnesiana), of lianas, or toborochi fibers. The two shovels examined by Campana measured 70 centimeters in length and 15 in width; one of them, however, was less wide at the top than at the bottom by several centimeters (Fig. 7).

Fig. 7. Shovel (sipe) made of wood, without its handle, formerly in use among the Chiriguano (from Campana, Pl. VIII, Fig. 1).

If the Chiriguano have abandoned the ancient wooden shovel, they have nevertheless faithfully kept the long handle to which it was attached and which permitted them to work the soil without having to bend over. A remark of psychological order becomes neces-
[439] sary in this regard. The Chiriguano could well have acquired in the Syrians' stores, where they are available, shovels already provided with handles and ready to use. If they felt the need to modify the handle and to give it the traditional form, it is because it did not correspond to the movements and position of the body and hands which an age-old tradition had ingrained.

In each human group all manual labor requires certain set gestures to which, to a certain extent, the tools are adapted. This explains the variations these exhibit from country to country and even from tribe to tribe. With regard to this, Professor

/335 cont./



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[464]

Mauss used to cite to us the following example: during the great war the French soldiers did not much like using English shovels different from their own, and vice versa. The Chiriguano I have seen laboring on military roads in Bolivia handle our shovels exactly like any European laborer; but back home, when it is a question of working a field, they return immediately to the ancestral gestures and are constrained to adapt the form of their instruments to them.

[126]

The handle fits into a handgrip carved out of a small block of wood and set in with the greatest care. The latter generally takes the shape of a crescent on which the hand rests comfortably. The handgrips with an elegant curve, which gave an aesthetic character to the ancient spades, have become very rare. In the course of /336/ my trip I was able to acquire only two shovel handles which were provided with them. One comes from Ibopeytí (Fig. 3) and the other was made for me by an old Indian of the Ivu mission. The workmanship of this latter specimen is careless, but it reproduces fairly faithfully the ancient models (Fig. 4).

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The use of the shovel among the Chiriguano probably dates back only three or four centuries. This instrument was unknown in ancient Paraguay where our Indians came from. The borrowing which could be presumed a priori has been confirmed by the discovery in the Quebrada de Humahuaca of wooden shovels similar in every detail to the ones I

Fig. 3. Shovel handle. Prov.: Ibopeytí. (1/11 nat. size.)

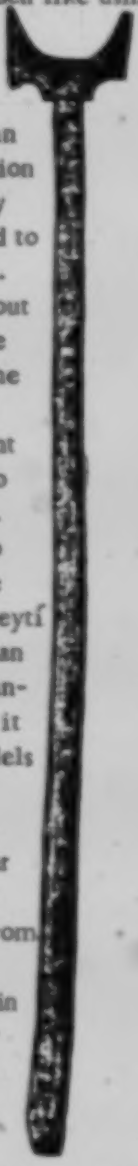


Fig. 4. Shovel handle. Prov.: Ivu. (1/8 nat. size.)

/336 cont./

241 have described here. These finds were made in the ruins of
412 the Alfarcito and of the Pukará de Tilcara (Debenedetti, 4,
172 Fig. 17 and p. 32) and at the Huerta in the same Quebrada de
243 Humahuaca. Numerous wooden shovels have been dug up at La Paya (Ambrosetti, 6, Figs. 236-237, pp. 457-458), and Ambrosetti supposes with justification that they were hafted like those of the modern Chiriguano. Debenedetti (1, p. 35) obtained a specimen of this instrument at Kipón in Salta province.

[171] This type of shovel is particularly well represented in the archeological material of the Chilean coast. Numerous specimens have been found in Calama, Chiuchiu, and Pica in Tarapaca province (Boman, 2, Vol. II, pp. 731-732 and Plate LXVIII a: and Uhle, 3, pp. 15-16 and Plate I).

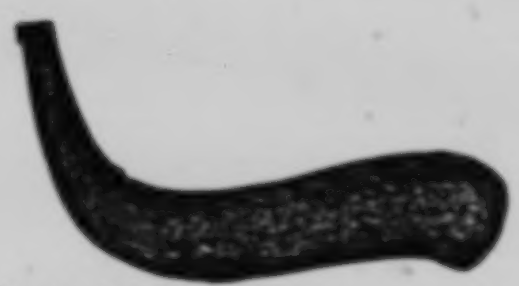
[171] The half-breeds and Indians of the Bolivian altiplano still work the earth today with a spade which in no way differs from that of their ancestors: moreover, it shows great similarity /337/ to the wooden shovel of the ancient Chiriguano (Chervin, p. 216, Fig. 120).

241 Nordenskiöld (9, pp. 30-32), studying the distribution
412 of this cultural element, established that it was peculiar to
171 the Andean zone and the adjoining regions. The Chiriguano
243 shovel nonetheless has a characteristic feature for which we should look in vain on all the specimens found inside the boundaries of the Inca Empire: this is the crescent-shaped handgrip. It corresponds quite precisely to the crutches terminating the oars in use among the tribes of Brazil, Paraguay, and the Guianas and on which the paddler puts his hand flat.

241 The Chiriguano formerly lived in a region rich in rivers and
412 streams, and they probably made use of paddles of this type to
174 go up or down them. Once settled at the foot of the Andes,
243 the resemblance between their former /Fig. 5 appears here/ oars and the shovels they saw in the hands of the Chané or the Chicha must have struck them; and they naturally sought to adapt to the new instruments this detail of structure whose convenience paddling had shown them. Such a hypothesis is not too adventuresome, for do we not have in the Chaco some shovels which have exactly the appearance of oars? (On this subject see the Ashluslay shovel published by Nordenskiöld, 9, p. 30, Fig. 1.)

/337 cont./

243 [496] [534] Once their fields are free of weeds, the Chiriguano call together relatives and friends. On the date agreed upon, all go to the fields early in the morning, after waking each other up with shouts, whistles, and by blowing into cow horns, which for them take the place of horns (in Chiriguano: waka-ranti) (Fig. 5), each trying to outdo the other. [622] In olden days the village chief used to take part in the sowing and watched to make sure that all helped one another.



[534] [321] Fig. 5. Cow horn (waka-ranti) which the Chiriguano use for a horn. The end is carved into a mouthpiece. Prov.: Ibopeyti. (1/5 nat. size.)

Sowing is done in a very simple way. If the ground is soft, the Indian sticks his shovel vertically into the soil, after giving two or three thrusts in order to push it in as far as possible. He enlarges the slit by pushing his shovel forward without drawing it out and slips two or three kernels of corn into the opening. Without changing position he makes two or three similar holes on his right and left, takes a step forward and begins again. The plants thus grow in a certain alignment /338/ which is far from perfect. Since several work at [461] [273] a time, the job is done quickly. At noon, or about two o'clock in the afternoon at the latest, they have finished their task and go back to the village where the chicha or kãwi, which the owner of the field has had prepared for his helpers, awaits them

/338 cont./

243 476 178 The sad state of decline in which the Chiriguano are at present has put an end to collective work, and it is only rarely that sowing is done in common. Each one must provide for his needs without any assistance other than that of his near relatives.

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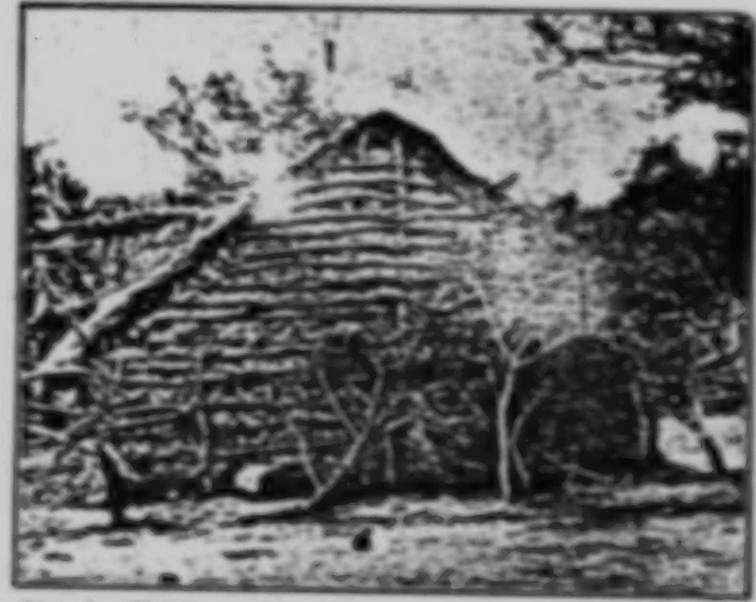

Fig. 7. Chiriguano hut (ho), temporarily abandoned by its inhabitants, who have gone to work in the fields. Caipipendi. (Photo. A.M.)

241 The Chiriguano cultivate the following plants:
Corn (avati): 11 varieties;
Beans (kumanda): 11 varieties;
Squash (andai and grindaka-wasu): 5 varieties;
Sweet potatoes (yeti): 6 varieties;
Yucca or sweet manioc (mandio) (Manihot utilissima Pohl);
Groundnuts (manduvi);
Pimento /peppers/ (kii) (Capsicum), very rarely cultivated;

/234 cont./

241 Sorghum (triko) (Sorghum saccharatum) (1):

[262] 1. Sorghum is cultivated only on a very small scale. It is a delicacy that the Chiriguano reserve for children, who suck its stalk.

/236/ Sugar cane:
Melons:
Watermelons (sandias):
Prickly pear (caini) (Opuntia spec.):
Fig trees:
Orange trees (in the missions).

[178] The Chiriguano cultivate only on a very small scale the plants which, like sorghum, sugar cane, fig trees, and orange trees, have been introduced by the Europeans. Of these only melons enjoy general favor.

248 They always devote some parts of their fields to the cultivation of plants of value only for their arts and manufactures. These are: cotton plants (mandiyu), cucurbitaceous plants (iâ) which grow on the ground next to their squash and furnish the containers they need, urucu (uruku), which scarcely exists except in the northern part of their habitat, and finally a species of reed (Arundo donax) with which they make the shafts of their arrows.

249 They also plant tobacco (peti), but I have never seen any in their fields. According to Nordenskiöld (11, p. 53), its [276] [123] cultivation is insignificant and rare. The Chiriguano are not great smokers, and the numerous packs of cigarettes I took along for them found only a few devotees. Among the Toba, Matako /Mataco/, or Chorotí /Choroti/ my stocks would have been exhausted in the wink of an eye, for these Indians love tobacco more than anything in the world.

276 756 824 [778] The use of tobacco among the ancient Chiriguano, as among their ancestors in Paraguay or Brazil, was reserved for the medicine man for their magical operations. Their use made of it a plant endowed with "mystical" virtues, and its

/339 cont./

276 756 [824] [113] consumption was limited (1).

> 1. Father Giannechini (Diccionario Chiriguano-Espagnol, etc., pp. 169-170) gives us very interesting details on this topic. Formerly, says he, tobacco was reserved for magicians and adults. [249] He states that even today where its use is most widespread it is cultivated on only a very small scale. The Chiriguano do not have the patience to let it ripen and dry it over the fire in order to be able to smoke it.
>
> [755] When they were called to a sick person, the medicine men used to put themselves in a trance by smoking ever so much. By this means they discovered the author of the illness and gave him battle.
>
> [789] We shall see farther along (p. 76) the role of tobacco in the magical ceremonies intended to make rain fall.

243 221 [114] At harvest time I visited the lands cultivated by the Indians of the Carurutí region in Caipipendí valley. From the end of February to the month of April, the Indians rarely spend the day at home. Most of the time they go to settle down in their fields, leaving the village as soon as the corn begins to ripen, not to return until the /340/ end of the harvest. [351] The house of the absentees is made safe from all foreign intrusion by thorn hedges which they raise all around or only in front of the door. The latter can also be closed by a cot or bedstead, which they put up against it and anchor solidly (Fig. 6).[1A]

243 221 123 This temporary migration of the whole population of a village to the fields sometimes made my job as a collector rather difficult. It /Fig. 7 appears here/ often happened that I found myself in nearly empty villages. [421] The rare Indians who had remained there refused obstinately, and rightly, to sell me the objects which interested me, if they belonged to an absent person.

[1A] [Fig 6 appears on p. 69 -- Analyst]

/340 cont./

421 Property is a sacred thing among the Chiriguano, and the nearest relatives cannot dispose of their belongings without their formal consent.

241 At the time of my stay in Carurutí, I once asked my old
115 friend "Captain" Karnapadyú to take me to his field. He was very
123 touched by /Plate VI appears here/ /341/ the interest that my wish
241
115 complied and in an instant showed himself ready to do the honors.
[123]

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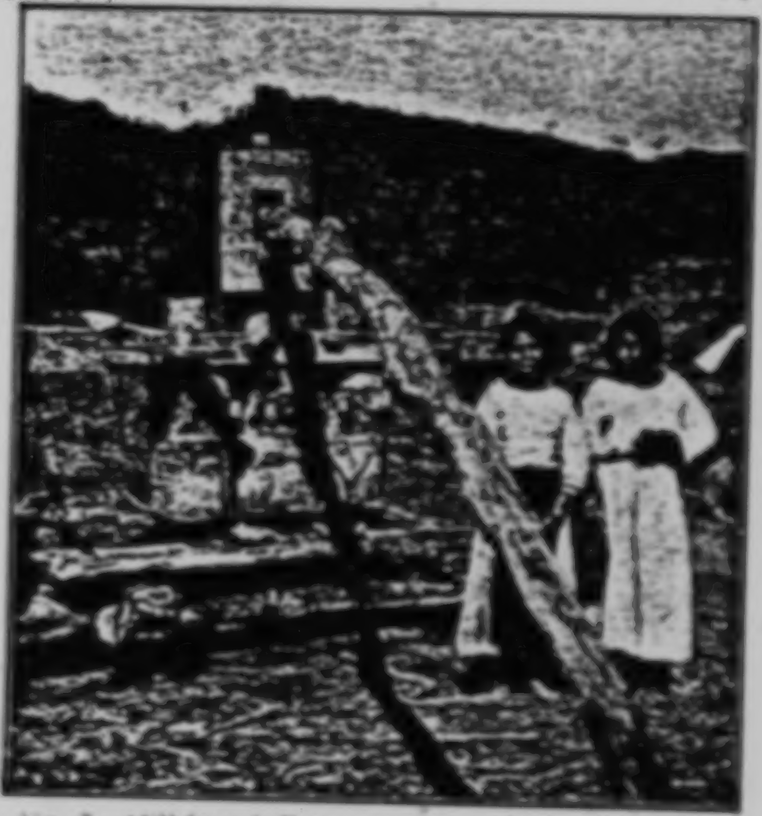

Fig. 7. Mill for grinding sugar cane at the Ivu mission.
(Photo. A. M.)

His field was about 700 meters from the village on top of one of the cliffs which border the "quebrada" /ravine/ of Carurutí. Access to it was by a steep path across fallen rocks. The entrance
[351] to the field was closed by a hedge composed of tree trunks and
[417] thorny shrubs which we climbed over with the help of an Indian-style ladder, that is, a thick branch with deep cuts for steps.

[Text continues on p. 74]

Plate VI

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[643] 1. Young Chiriguano, daughter of the "capitan grande" [illegible]. Her cheeks are painted with balarapa powder.

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2. Chiriguano Indian girl from the Caruruti region, considered a beauty by the Indians. (Photo. A.M.)

/241 cont./

241 115 ladder, that is, a thick branch with deep cuts for steps. Captain Kamapadyú's chacra /cultivated clearing/ was about 700 meters by 70 meters in size. At the edge stood a small wooden hut covered with straw.

The "Captain" began by showing me some manioc plants and had me cross a large square sown exclusively with beans and gourds /citrouilles/. The corn fields came next. They were divided in two by a second hedge formed of trunks and thorns. Squash /courges/ grew between the rows of corn. After the maizal /field of corn/ followed a second expanse covered with beans, squash, and melons, which Kamapadyú told me belonged to his daughter. Here and there rose several stalks of sorghum. A new cornfield was opposite the

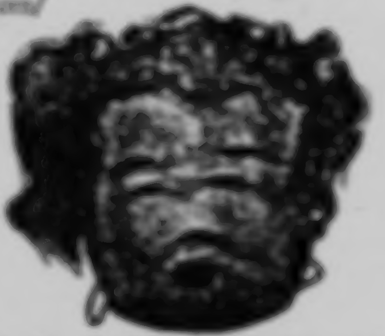

Fig. 6. Mask ([illegible]) carved out of a calabash and provided with hair and eyebrows of horsehair. It was hung up in a planted field where it was serving as a scarecrow. Prov.: Caruruti. (1/3 nat. size.)

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[illegible]
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241 115 [322] [415] [824] first, and another cabin rose at its edge. In both of these properties the only plants cultivated for their manufacturing value were the cucurbitaceous ones from which the Indians make their cups and bottles.

Next, on the opposite cliff, I visited the chacra of another Indian of the same village. A steeper and more difficult road than the first led to it. The plantation was lower down a hill on which a little hut was perched. These fields were almost solely covered with corn among whose stalks grew squash. As before, the maizales were preceded by plantings of beans and squash.

/361 cont./

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592 Parrots are veritable plagues for agriculture in the Chaco and cause great damage. In order to fight their voracious bands the Chiriguano make scarecrows by attaching to the tip of flexible poles the masks they wear during the carnival festivities and which they have no use for afterward (Fig. 6). It is the need to be constantly /362/ on the watch to repulse the intrusion of these formidable bands of plunderers which obliges the Indians to come and live in their fields as soon as the corn ripens. The children and young people have the task of frightening off by their shouts these insatiable marauders. As soon as they see or hear a flock of parrots, they emit a long modulation which, it seems, has the effect of scaring them. If

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411 the parrots come too near or perch on the fields, the Indians make them flee by bombarding them with stones with their slings. They have two kinds of these. Wherever the Chiriguano

[177] are in direct contact with the Quichua /Quechua/, these slings are of wool (Plate VII, 1 and 2); elsewhere, especially in the Caipipendí valley, they are of vegetable fibers and made according to the net technique (Plate VII, 3). No doubt the Chiriguano borrowed this weapon from the Andean populations. To be convinced of this it suffices to compare the slings of the Indians and half-breeds of the department of Tarija with that of the Chiriguano (Boman, 1, Fig. 207, p. 581).

[245] Another means of scattering the birds is to stretch a string above the fields. I do not know the effect that this measure can have on them.

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245
[351] The fields of the Chiriguano Indians are always surrounded by a high, thick hedge which protects them from animals, wandering cows and horses, which could get in and play havoc with them. Grasshoppers sometimes do them much harm. In the Caipipendí valley I saw a field in which they were swarming and which seemed to have been abandoned for this reason (1).

1. When grasshoppers are particularly numerous, the Chiriguano dig ditches which they make them go into and in which they bury them. (Diccionario Chiriguano-Español, etc., p. 80.)

/342 cont./

243 462 Wives accompany their husbands to the fields. They spend the day there spinning, sewing, grilling ears of corn, or roasting manioc. In the evening, if they return to the village, [482] the wife comes back bent under the weight of her añapoka, or carrying-net full of ears of corn. Sometimes the men help [482] them. Those who have donkeys and horses use them as beasts of burden.

482 Transport of corn is done generally with the help of the carrying-net, but makeshifts let them do without it in case of necessity. The ears of corn are held together in bundles by means of leaves which encompass them and are suspended from a flexible switch bent in the shape of a figure eight. When the two loops are balanced, one can raise them by grasping them by the middle.

251 In the village the ears are either stored in granaries on piles, to which steps cut in a tree trunk (Fig. 9) lead, or kept in the hut where a special corner has been made into a compartment. A tree trunk equipped with a natural fork may serve /Plate VII appears here/ /343/ as a storage place for corn. The ears, tied into bundles, are piled between the two branches of the fork (Fig. 10).

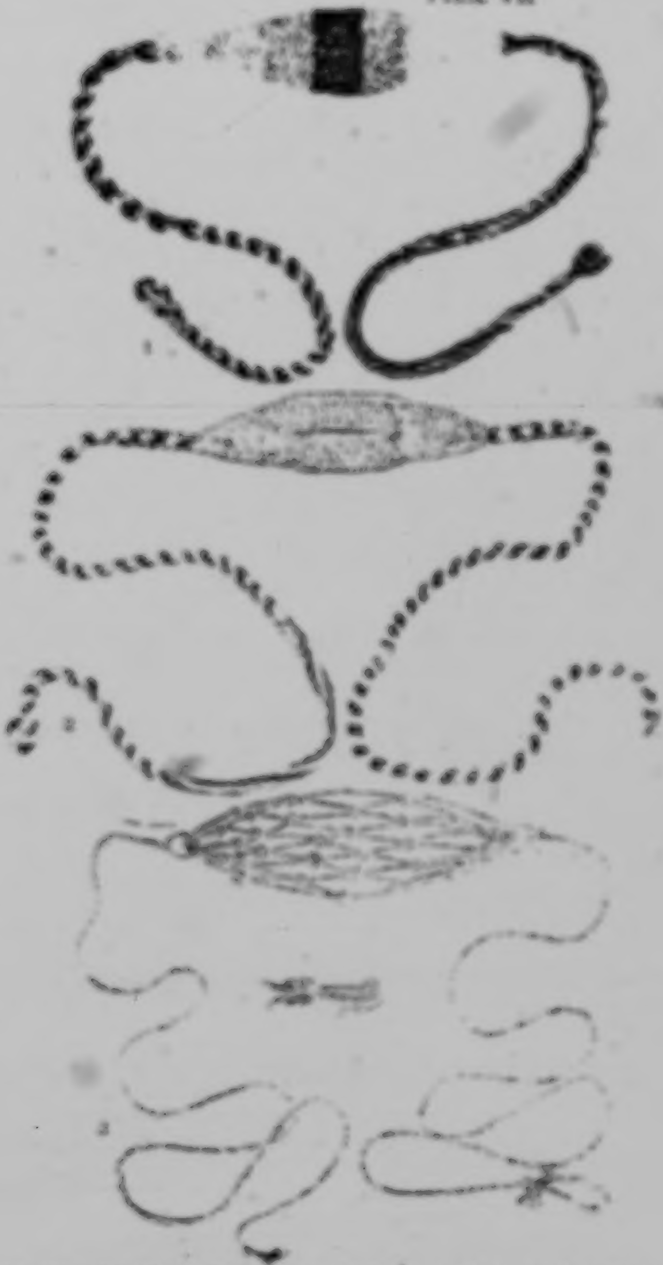
243 789 Formerly, before their dreadful decline began, the Chiriguano had recourse to magical ceremonies to hasten the ripening of corn and to avoid drought or too great an abundance of rain. /Fig. 9 appears here./

When the sun threatened to burn the harvest, they had one or several medicine men come who were charged with bringing the recalcitrant clouds. Provided with a cigar, they went around the fields blowing the smoke in every direction (Diccionario Chiriguano-Español, etc., p. 167). The symbolism of this rite of homeopathic magic is clear: the smoke represents the clouds which the ipaye is to gather.

[524] [778] The game of mbotó represents the survival of a magical ceremony having to do with the growth of corn and its maturing.

[Text continues on p. 78]

Plate VII



1. Sling (*tamomboka*) of yellow, purple, white, and green wool. Prov.: Cuevo. (1/4 nat. size.) 2. Sling of brown, green, and white wool. Prov.: Ivu. (1/5 nat. size) 3. Sling of vegetable fibers (*wembé* bark). Prov.: Carurutí. (1/4 nat. size.)

/344/

526 In the Chiriguano missions or in the villages of the Cai-
178 pipendí valley one finds on the large village plaza /Fig. 10
243 appears here/ an abundance of onion-like objects made of leaves
789 of corn folded together (Fig. 11). Children throw them to each
other with the flat of the hand and try to catch them again before
they fall to the ground. A hurried traveler would see in this

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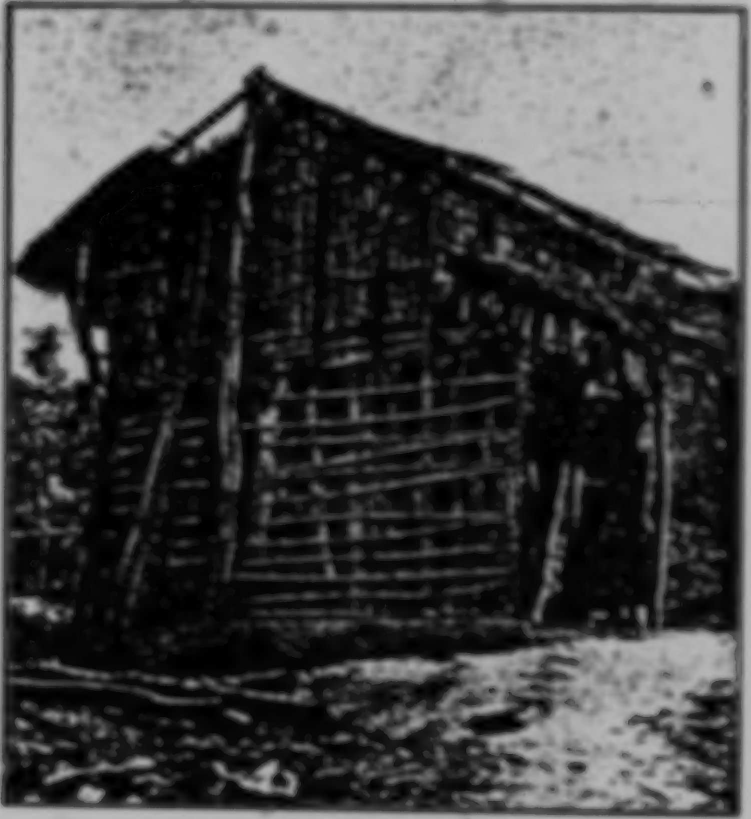

Fig. 9. Corncrib on piles (avatiró). Ivu. (Photo. A.M.)

526 game only an Indian form of our court tennis or a rudimentary
178 tennis. Actually, this is certainly the present significance of
243 this amusement. In olden days the meaning was not the same,
789 as I learned in the Macharetí mission. Only a few years ago
mbotó was played only at the time when the corn was beginning
to ripen. The children formed a circle and threw this kind of
shuttlecock to one another. If by chance one of them let it fall
through inadvertance or awkwardness, he left the place

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immediately, chased by his comrades who pulled his hair energetically. The awkward player who threw the ball in such a way that his partner could not catch it was in the same category as the one who let it fall, on condition, however, that his opposite number had not made the gesture of catching it. Once the corn was ripe, they stopped playing [illegible][7].

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The game of [illegible] has a wide distribution in South America, but it is limited to the populations of the Amazonian basin and the Guianas. Doubtless the Chiriguano introduced it into the Chaco (Nordenskiöld, 5, p. 103).

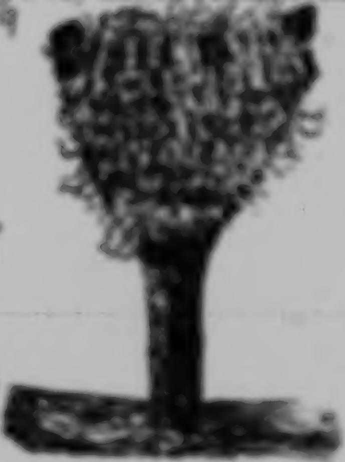

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Fig. 10. Forked tree on which the Chiriguano pile corn inside their huts. This device may have given rise to the corncribs on piles.

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This game without any doubt derives from a magical rite whose object was to promote the beneficial course of the sun and to oblige it to shine without interruption to make the corn ripen. The straw shuttlecock represents the sun. The period when this game is played and the meaning the Chiriguano attach to it make any hypothesis a very likely one. Preuss demonstrated that in all of Central America and even in North America the /361/ tennis game arose out of a magical operation intended to influence the sun.

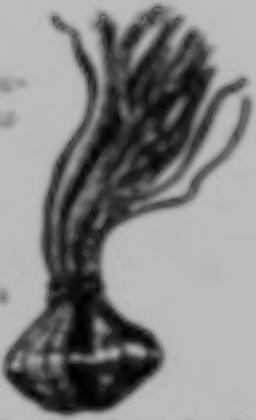

Fig. 11. Straw shuttlecock ([illegible]), accessory for the game of the same name. Prov.: Caraparí (1/3 nat. size.)

/243 cont./

[241] The Chiriguano are proud of the extent of their fields.
115 "Captain" Karangudsú made me walk over all of his, emphasizing its size and the abundance of its products. Another Chiriguano, after taking me along across all of his plantations without sparing me one plot of ground, told me as he was bringing me back, with an air at the same time proud and questioning: "Guapo ye" /I am enterprising/. I answered that he was indeed very "guapo." He seemed flattered and happy.

[illegible] The father clears his daughter's field, which represents for her a kind of dowry. The son-in-law must then take care of it, do the sowing and reap the harvest (1). My guide Cipriano complained bitterly about his son-in-law, whose laziness had obliged him to harvest his daughter's corn himself.

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[594] 1. Corrado (p. 153) states that young married couples live at the expense of their parents and that they do not cultivate any chacra nor build a house before having a child.

Chapter III

Cooking and Food

Food Resources

[illegible] I have eaten meat only very rarely in Chiriguano villages, and I have never had a chance to taste a piece of game. It is not that this latter has disappeared from the region, exterminated by man, but the Chiriguano do not take the trouble to pursue it. In former days they were enthusiastic hunters, like nearly all the Indians of tropical America. When they were expecting guests for a drinking feast, the men went out into the bush and during 15 to 20 days got a good supply of the flesh of the peccary, deer, nandu, pigeons, armadillo,
[251] chuña /a wading bird/, and even parrot. To preserve it they dried it in the sun without salt (Nino, pp. 249-250).

/[illegible] cont./

Outside these official expeditions they doubtless used to hunt for pleasure or simply to interrupt the monotony of their existence.

Quadrupeds were killed with arrows with lanceolate tips, originally of wood, today of iron (Plates VIII and IX, ?); small game, with arrows tipped with a barbed wooden rod (Plate IX, 3-5). Birds were taken in traps or killed with a special arrow having a spindled ferrule (Plates X-XI).

Anyone who has seen the little dogs of the Chiriguano Indians, with elongated /sic/ muzzle, pointed ears, short hair, and arched tail will see with surprise how animals so miserable, stupid, and sluggish could have been trained to render service to man. Nevertheless, such seems to have been the case. For hunting the peccary, for example, the Indians employ the dogs, who track them and /Figs. 12 and 13 appear here/ force them to hide in their dens, from which they are smoked out and killed with blows of a stick when they try to run away. At least this is how the inhabitants of the village of [illegible] (upper Pilcomayo) told me they had killed a peccary which they showed me at the time I was there.

For the modern Chiriguano, hunting has lost its reason for existing as an activity having an economic character, except perhaps /Plates VIII, IX, X, and XI appear here/ /[illegible]/ /Fig. 14 appears here/ for those of this nation who live in the region of the upper Pilcomayo. At least this is the impression I had after examining their huts: the bedsteads or wooden cots were often covered with peccary skins and the old deerhorn awls (Fig. 17) numerous enough to be able to be exchanged for a trifle. The relative abundance of these objects proves that among these Indians hunting has not been relegated /Fig. 15 appears here/ to the rank of a simple sport and that it keeps, at least in part, its past importance. The contrast is striking if one then goes into the zone of the Franciscan missions: there, more peccary skins, more perforators made of deerhorn, more ostrich feathers. In the villages of the upper Pilcomayo there is no cabin, poor as it may be, in which a bow and a bundle of arrows are not slipped

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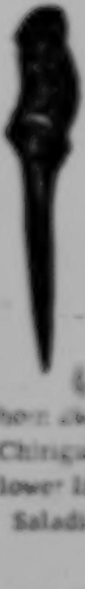

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C
[304]
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Fig. 12. Deerbone awl ([illegible]). Formerly the Chiriguano used them to pierce the lower lip of their children. Prov.: Saladito. (1/2 nat. size.)

Ce
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→

Ce
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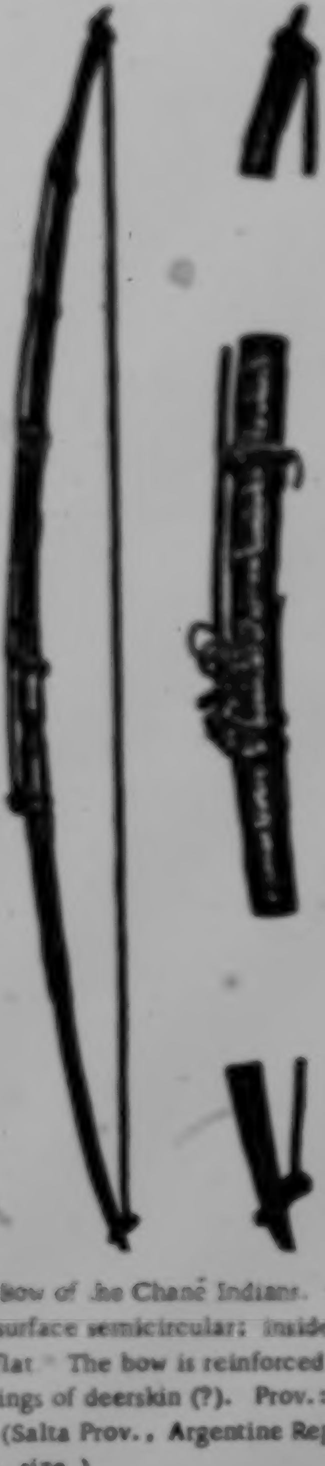
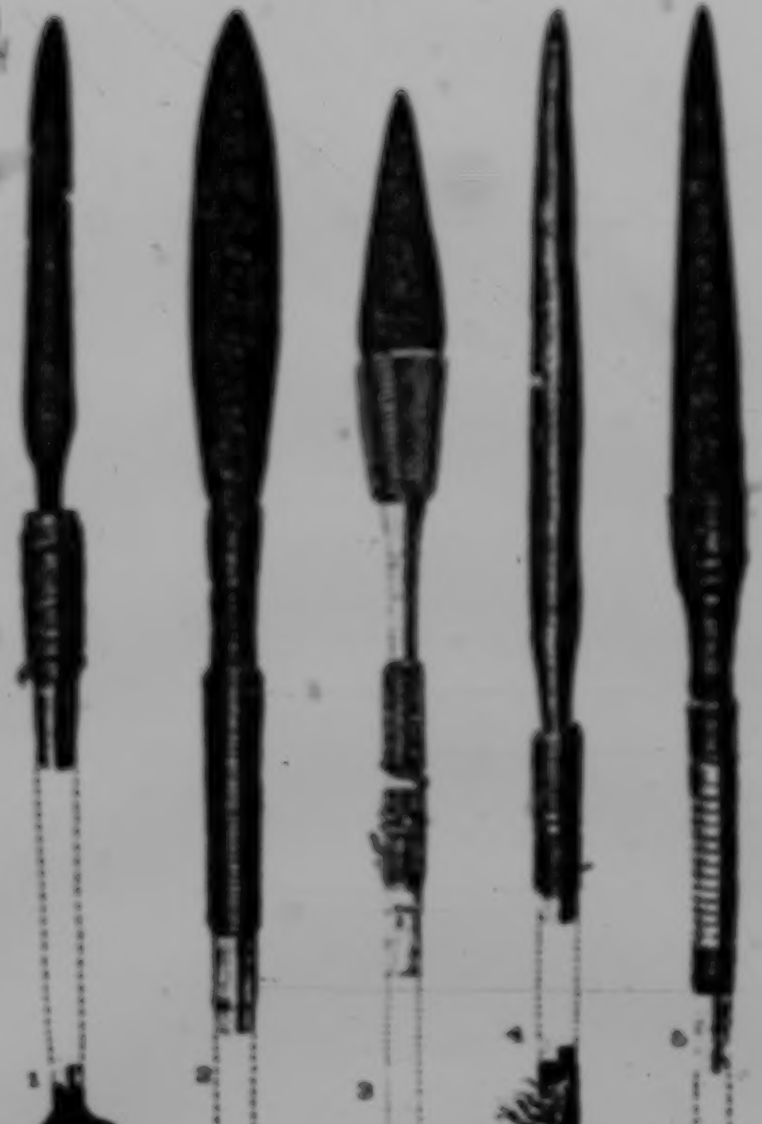


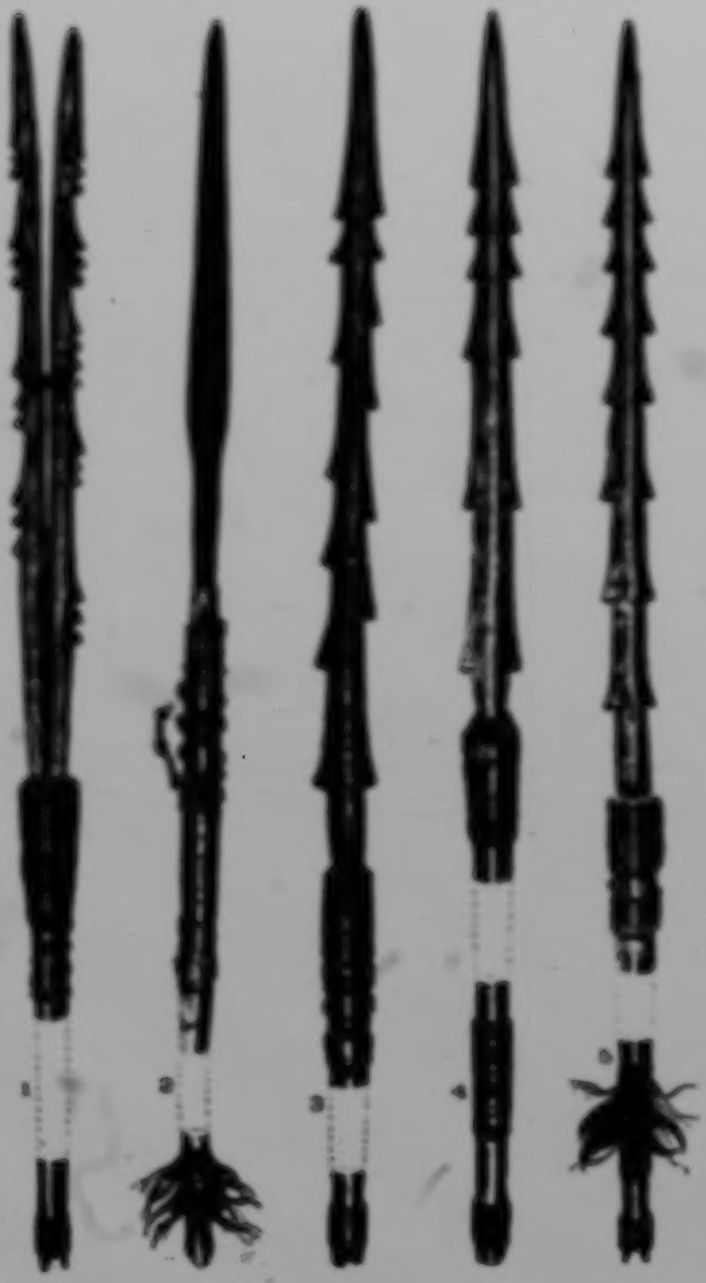
Fig. 13. Bow of the Chané Indians. -- Outside surface semicircular; inside surface flat. The bow is reinforced with casings of deerskin (?). Prov.: Tuyuntí (Salta Prov., Argentine Rep.). (1/7 nat. size.)

Plate VIII



Arrows for war or hunting large game (huî iya). Chiriguano. The tip is an iron blade, except for No. 4 which ends in a slender piece of wood. Nos. 1, 3, and 4 come from Ivu; No. 2 from Tigüipa, and No. 5 from Pipi. (1, 2, 5 are 1/2 nat. size; 3 and 4, 1/3 nat. size.)

/Plate IX



/Caption on following page./

/Caption for Plate IX on preceding page./

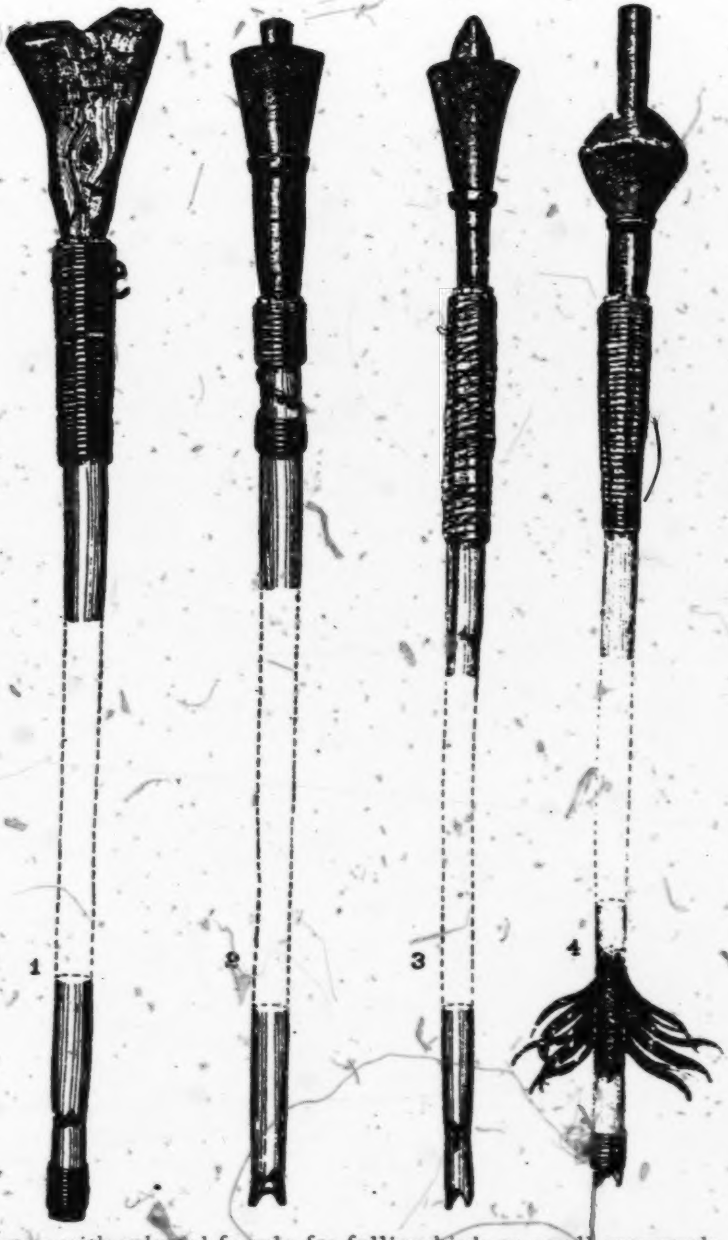
411

1. Arrow for hunting the yakú (pavo del monte /wild turkey/. Chiriguano. Prov.: Caipipendí. (1/4 nat. size ± .)

2. Arrow tipped with an iron rod wedged into the shaft with the aid of a wooden peg, perforated, and tied with a small cord. Reinforced with wembé bark. Prov.: Tintapaw. (1/2 nat. size ± .)

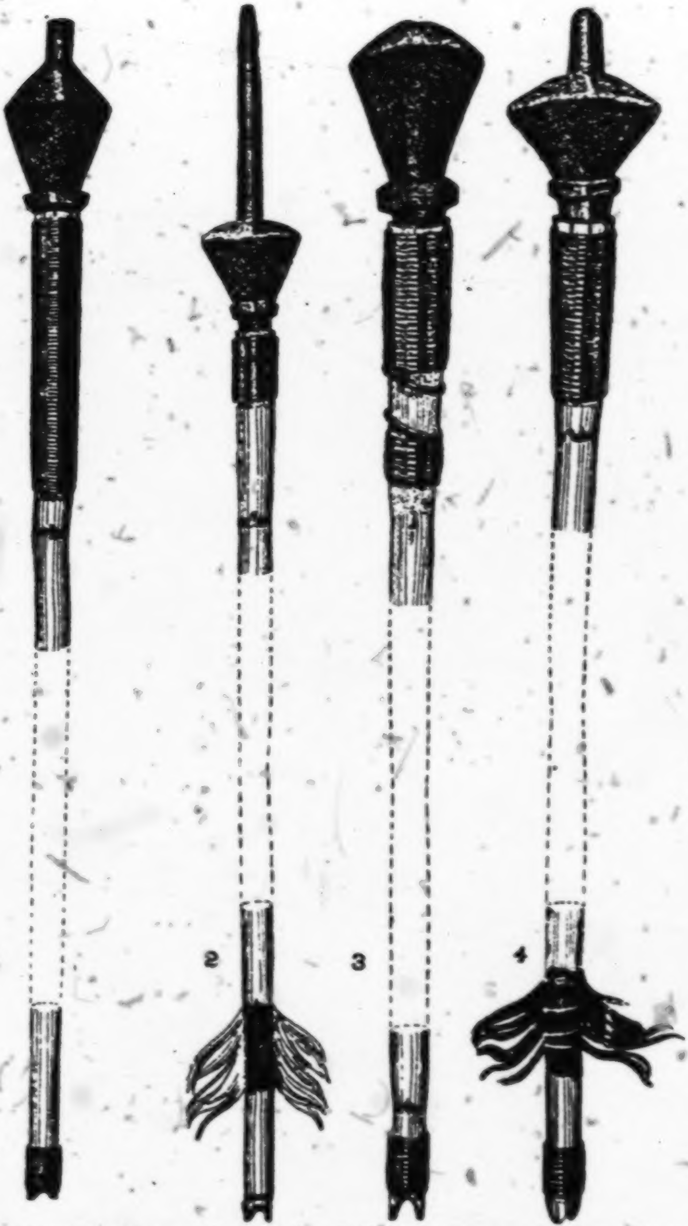
3-5. Arrows with barbed points. Prov.: Caipipendí. (1/3 nat. size ± .) Note: Arrow No. 5, as an exception, has three feathers.

Plate X



Arrows with splayed ferrule for felling birds or small mammals (*songo*). No. 1 comes from Ivu, No. 2 from Tintapaw, No. 3 from Tiwiraití (upper Pilcomayo), and No. 4 from Caipipendí. (1/2 nat. size.)

Plate XI



Arrows with splayed ferrule for felling birds or small mammals (songo). Nos. 1 and 3 come from Ivu, Nos. 2 and 4 from Caipipendí. (1/3 nat. size.)

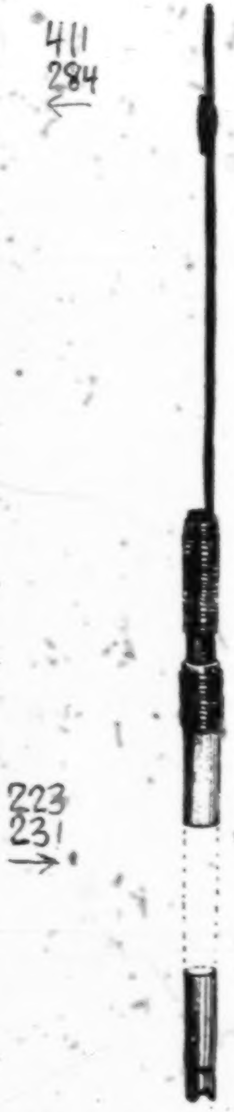


Fig. 14. Hunting arrow. Chiriguano. The point is formed by an iron rod to which a nail has been fastened to form a barb. This point is held in the shaft by means of a wooden peg Prov.: Ñawirenda. (1/4 nat. size.)

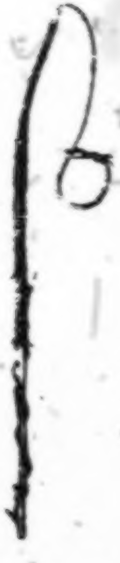


Fig. 15. Upper tip of a lorero (long wand with a noose at the end, with which the Chiriguano catch wild parrots they have attracted by means of tame ones). Prov.: Ivu. (1/3 nat. size.)

/347 cont./
433 between the roof beams. Once out of this region the ethnog-
224 rapher will have all the difficulties in the world to acquire
184 these weapons for his collections. If they are offered to him,
[411] they will be either a few souvenirs of former days kept by an
old man or crudely made specimens without any value other
than that of a toy or a sport accessory for some rare lover of
hunting.

224 The Indians of the semi-independent valley of Caipipendí
411 are still, in some villages, capable of making a bow and using
184 it. The arrows, which I bought from them in rather large
quantity, almost all belonged to a single type and were in-
tended, from what they told me, for killing the yakú (pavo
del monte /wild turkey/ (Penelope sp.). They are long reeds
armed with two barbed wooden rods (Plate IX, 1). One must
not conclude that the yakú, abundant as they may be, rep-
[433] resent an appreciable food resource. Besides, hunting is
scarcely practiced except by the young men, who do it for
[126] fun. The Indian who gave up to me the handsomest lot of
[425] these arrows felt some remorse about it; for, as he explained
to me, /348/ they belonged to his little boy, who would not
fail to cry when he found out that his father had sold them
without his consent.

857 Chiriguano children are even more ardent about shoot-
868 ing with a bow than ours. One can see them run around the
224 village trying to shoot down with little miniature arrows
(Plate XII, 2 and 4) the birds which light within their reach.
Contrary to what took place formerly, once grown up they will
not benefit from the skill they have thus acquired. /Fig. 16
appears here./

223 Some Indians of the Caipipendí valley sold me large
[126] bunches of nandu feathers. I could not find out whether they
had taken them from birds killed in the region or whether they
had been hunting them in the east nearer to the great deserts.
That would not have been at all improbable, for nandus are
certainly not numerous in this region; in a month's stay I
287 did not see any. These feathers serve for fashioning /Fig. 17
439 appears here/ feather dusters, which the Chiriguano sell in the

[Text continues on p. 91]

231
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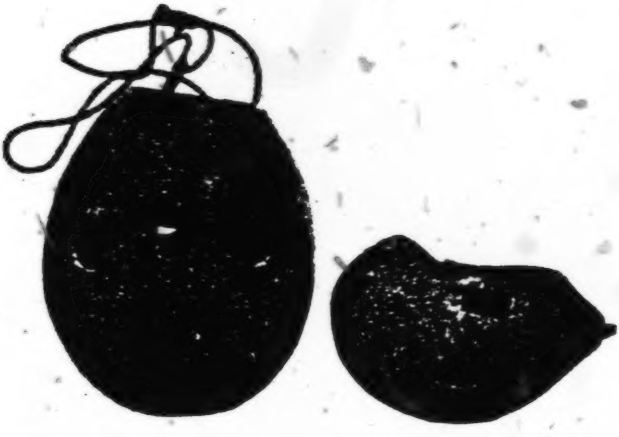
Fig. 16. Perch with troughs for tame parrots which the Chiriguano use for catching wild ones. Prov.: Ñawirenda. (1/10 nat. size.)



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445
825

Fig. 17. Perforated calabashes in which the Chiriguano put chicks to protect them from birds of prey. Prov.: a, Carurutí; b, Ibopeytí. (1/4 nat. size.)

/348 cont./
287 half-breed villages. For the meager profits which this trade
439 brings them they undertake long trips and even go as far as
[484] Sucre, where they are paid two to three pesos for each
[435] feather duster.

224 Hunting lost its importance from the day when the
178 Chiriguano began to have cattle. Already about 20 years ago,
231 those who /Plate XII appears here/ /349/ had several sheep,
433 goats, cows, or even chickens did not take the trouble to
accompany their comrades into the bush in search of game.
What is the use of tiring oneself out running after peccaries
for long days and risking getting oneself disemboweled or
coming back empty-handed if just by staying home one can
treat one's guests with some roast of meat or chicken broth?

231 The price of cattle has gone down a good deal these last
435 years, and the Indians no longer need to go to the sugar mills
[464] of Argentina in order to come back with a cow or two in
[465] recompense for four to five months of hard work. Goats, sheep,
and pigs are valued at two to four pesos apiece and it is often
471 even a question of "prices for foreigners." A cow currently
231 costs from 25 to 30 pesos, and an economical Indian has the
[435] means to acquire several during his life. Little by little, in
each village modest herds have been formed, which the Indians
care for like treasures. They husband them carefully, like
all primitive peoples who raise cattle. They almost never kill
their cow, and they sacrifice only rarely a goat or a sheep to
their gluttony (1). In showing themselves to be so economical
they are not obeying any superstition but simply are afraid to
556 diminish their capital. The wealth of an Indian is gauged by
the number of his cows; and, in their Spanish jargon, "vacudo"
/vaca, "cow"/ is a synonym for rich (2). Some of them have a

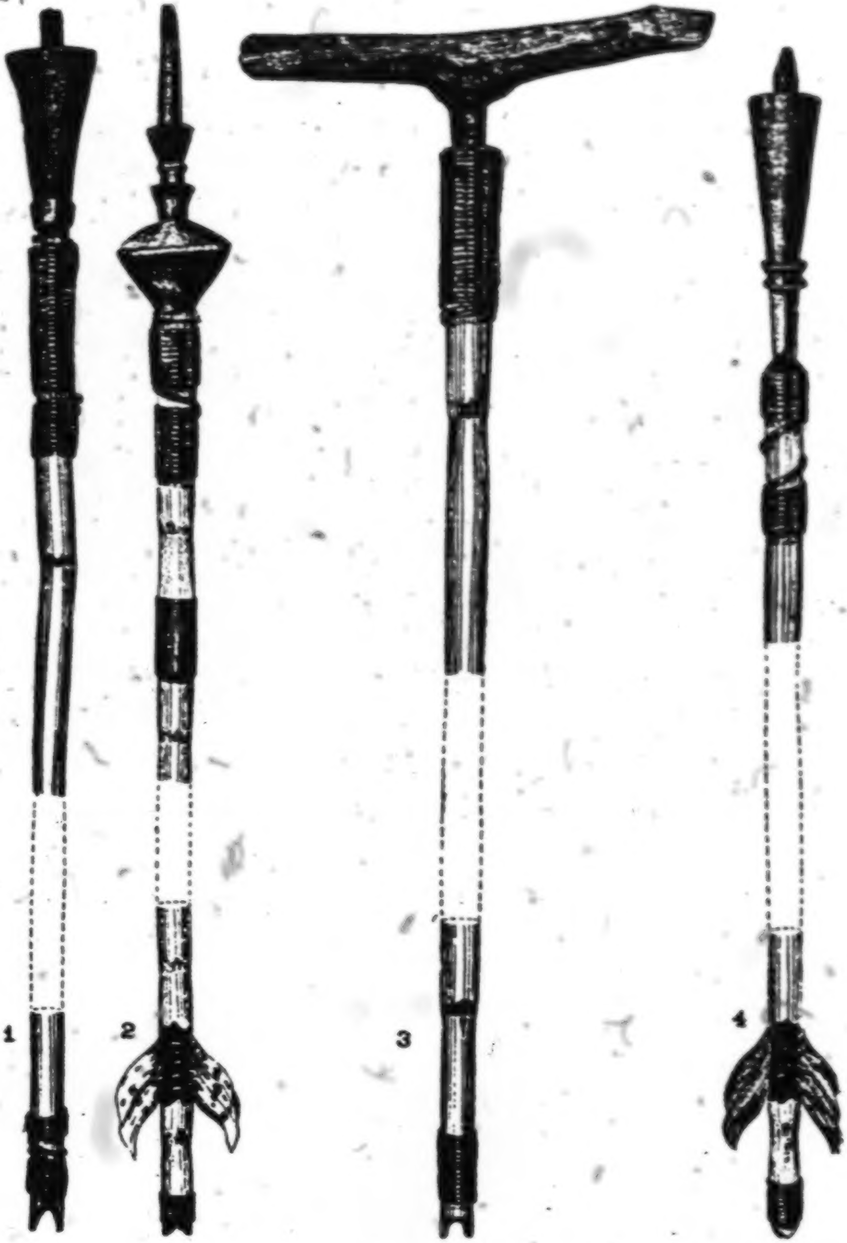
---

[262] [178] 1. In former times they used to feel an unconquerable repugnance toward pork, which is dissipating nowadays (Nino, p. 252).

2. An Indian of Ñawirenda had as many as 40 head of cattle.

[Text continues on p. 93]

Plate XII



Arrows with splayed ferrule for felling birds or small mammals (songo). Nos 1 and 3 come from Ivu, Nos. 2 and 4 from Caipipendí. (1/2 nat.

/349 cont./

556 [435] [437] tendency to estimate the value of objects in cows. For example, a loom with a nearly finished poncho was offered to me "for a cow," and the owner of the loom could not understand that it was difficult for me to convert the exchange into money.

262 [251] Charqui, or meat dried in the sun, most often replaces fresh meat in the menus of our Indians. It is not a question of preference, but of necessity. Charqui is cheap and is bought in any estancia.

Fishing

221 226 When I went through the Chiriguano villages of the upper Pilcomayo and the Parapiti, the rivers were in flood, the corn was ripening in the fields, and no Indian wanted to let the parrots eat his corn in order to go to catch fish at the risk of getting himself carried off by the current. If I had come back to these same villages in July or August, the scene would have been completely different. The rivers would have been only thin trickles of water, and in every direction I should have perceived men /350/ and women busy fishing. The fishing season would have been at its height.

[178] The Chiriguano, having come from a country rich in watercourses, have in this respect preserved the traditions of their ancestors of the Paraná or the Paraguay.

226 [227] [482] Some, equipped with large landing nets (Fig. 18), form barriers against the current and advance, gathering the fish as if with a spoon. Then they grab them and attach them to their belts, after /Fig. 18 appears here/ threading them on a cord by means of a wooden needle (Fig. 19). Others lie in wait for a fish in the water and, as it goes by, impale it with an arrow equipped with several points (Fig. 20) or simply with two long, barbed wooden rods. Some, with the help of stone barriers, try to make the fish converge toward the opening of a wicker trap (1). Sometimes a group of individuals turn aside a

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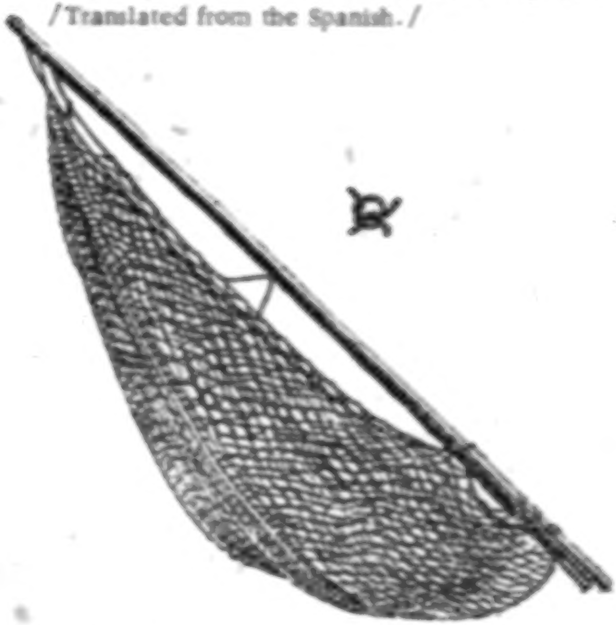
1. Compare Lizárraga (Vol. I, p. 260): "in summer (the Chiriguano) divert a stretch of the river; they leave the fish in the drained

/350 cont./

C 226 arm of the river: in waist-deep water they enter it with their bows and arrows and shoot them there, and any that escape the arrow the women go after with nets into which they fall. /Translated from the Spanish./

C 227



C [283] Fig. 18. Landing net of cotton thread (puisa). Chiriguano. Prov.: Ibopeytí. (1/19 nat. size.)

C 226 watercourse, leaving the fish dry, and catch them by hand or
C [227] with a sieve (?). Iron fishhooks are equally popular: the

Ce 226 2. Nordenskiöld (2, pp. 184-185) describes a curi[illegible]ay of catching fish which is in use among the Chané of the Itiyuro River. They set branches in the water, which give shade and attract the fish. They also put there a calabash with some scraps of corn. The fish enter the calabash, whose neck is narrow. When several fish have gone in, the women close the orifice of the calabash with the hand and pull it up to the surface.

/351/

226 [229] /Figs. 19-22 appear here/ /352/ Chiriguano attach them to the end of long cords. A spear with one or two points serves to harpoon the enormous surubú which pass within their reach [481] (Fig. 21). It goes without saying that the Chiriguano are marvelous swimmers.

262 439 The Chiriguano like fish (1). If they live far from the Pilcomayo and cannot get any directly, they buy it from the Toba or the Matako, who are good fishermen and in addition have the advantage of living on the very banks of the lower Pilcomayo.

[482] In the dry season one can see near Pilcomayo a continual coming and going of Chiriguano, bent under the weight of their nets full of ears of corn that they are going to barter for fresh [484] or dried fish. They would not hesitate, it appears, to travel 150 kilometers to feast on it (Nino, p. 251).

226 195 229 481

1. The skill of the Chiriguano at fishing had already attracted the attention of the ancient chroniclers. Acosta (Vol. I, p. 236) reports that he had a chance to see them handle the spear, a specimen of which is reproduced here in Figure 21. "Some Chiriguanas plunged under the water and, swimming with admirable speed, followed the fish, and with some fish spears, or harpoons, which they carried in the right hand, swimming only with the left, they struck the fish; and, spearing it thus, they came up, so that they certainly seemed to be more fish than men of the land." /Translated from the Spanish./

Rosen (1, Fig. 215, p. 213) represents a Chiriguano holding one of these two-pointed spears in his hand.

262 439

Fig. 19. Wooden needle (timosa) with which the Chiriguano thread the fish they have caught in order to be able to carry them more conveniently around the waist. Prov.: Tintapaw. (1/3 nat. size.)

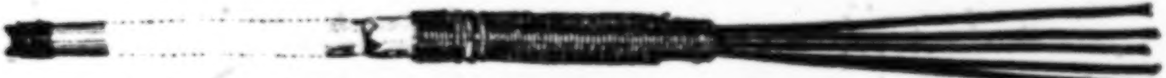


Fig. 20. Arrow used to catch fish. The points are of iron wire: formerly they were made of cactus spines. Prov.: Pípi. (1/2 nat. size.)

Fig. 21. Spear 4.70 meters long, which the Chiriguano use to harpoon large surubú when the latter swim within their reach. Prov.: Ibopeytí. (1/33 nat. size.)

Fig. 22. Spit for roasting fish. Prov.: Ibopeytí. (1/7 nat. size.)

/352 cont./

C 252 The fish begins by being opened and cleaned and only then is it boiled or roasted. In this last case it is inserted between the two branches of a switch split for three quarters of its length (Fig. 22). So that the latter does not open completely, the lower part is fastened securely with bands of bark, and so that the fish does not fall out once it is inserted in the interstice, the upper part. G [252] Among their ancestors, the Guarani, such a spit would have been superfluous, because to grill the product of their fishing or hunting they used to construct buccans. C [251] [262] Our Chiriguano also eat fish dried in the sun and enjoy it in this form combined with some corn dish.

/353/

Chapter IV

Cooking

Fire

C. 372 177 The modern Chiriguano more and more use matches of Bolivian make, but their poor quality has contributed to maintaining the popularity of the tinderbox. That of the Chiriguano, borrowed recently from the white men, is composed of a flint and a piece of iron with which they make sparks fly, which fall on a little wild cotton (the one which the fruit of the palo borracho (Chorisia insignis) produces). This tow (tata rimbiuna) is kept in a small receptacle made from the end of a cow horn or an armadillo tail. /Figs. 23 and 24 appear here./ It is hermetically sealed by a wooden disk, which a small cord passing inside the capsule and coming out through a hole at the tip of the horn or tail allows to be put back in place with a single motion. This ingenious contrivance is not, however, of Indian invention; I saw it adapted to the tinderboxes of the creoles in the Argentine Republic. C [415] [281] Some Chiriguano make cloth wicks which at first sight would seem to have been produced in one of our factories. The tinderbox with its accessories is carefully kept in small bags of deerskin, wildcat, iguana, etc. (Figs. 23 and 24).

353 cont./

372 (171) In former times the Chiriguano made fire exactly like all the Indians of South America, by rubbing two sticks one against /354/ each other. One of my friends from Caruruti reconstructed one of these devices for me in the hope of surprising me and getting a good price for it. He took two sticks of *tata iwira*, or fire wood (1), cut one of them lengthwise and provided one of its sides with two cups along which he contrived a perpendicular groove. These two little furrows were intended to conduct the glowing sawdust onto the tinder placed on the ground. /Fig. 25 appears here./ The other stick was slightly sharpened to allow it to go into the cups. Since this

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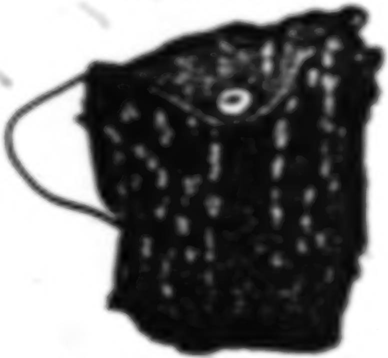

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Fig. 23. Small deerskin bag in which a Chiriguano used to carry a tinderbox and its accessories. Prov.: Pipi. (1/3 nat. size.)

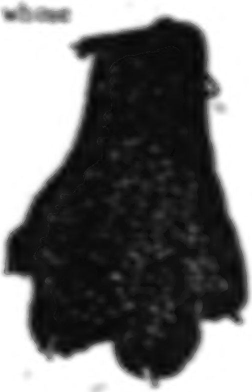

Fig. 24. Puma paw (*yagua-pintaipo*) made into a bag. Prov.: Saladito. (1/4 nat. size.)

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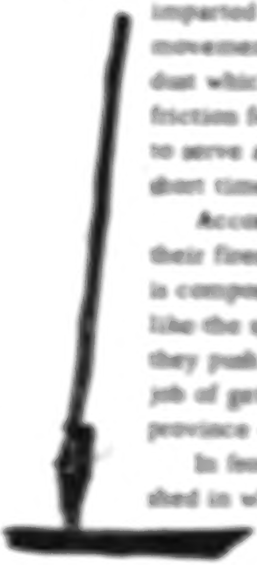
(824) 1. According to Father D. Giannecchini (*Diccionario Chiriguano-Español*, etc., p. 91), the Chiriguano might use, for obtaining fire by rotation, sticks made from the wood of a red liana whose flower has five yellow petals with a red spot on one of them. The Chiriguano name for this plant is *iaipo-pinta*. 372 (824)

/354 cont./

372 small stick was too short to be handled with ease, he fastened it securely to another stick by means of vegetable fibers (embira) (Fig. 25). This done, he sat down on the ground, pressing the soles of his feet on the small cupped stick, and imparted with the palms of the hands a rotating movement to the other stick. The glowing sawdust which was detached by the effect of the friction fell on dried dung placed near the gadget to serve as tinder, which, at the end of a rather short time, began to catch fire.

354 According to the season, the Chiriguano light their fires inside the hut or outside. The hearth is composed of long branches which they lay out like the spokes of a wheel. As the ends burn, they push them closer to the central fire. The job of getting the dead wood falls within the province of the men (Fig. 26).

[462] [313] 343 In front of the huts they often erect a little shed in which the women do the cooking. The roof of this shelter serves as a shelf for putting provisions and utensils on.



[372] ← Fig. 25. Ancient apparatus for making fire, reconstructed by a modern Chiriguano. Prov.: Caruruti. (1/6 nat. size.)

Preparation of Food

262 The modern Chiriguano do not seem to observe any food prohibitions, at least in daily life, for the custom of fasting, for women at the time of puberty and for men upon the birth of a child, is not yet lost. In olden days certain animals /355/ were taboo (1). The men of a few villages thus reserved for themselves

[789] [825] [775]

1. In order not to kill one of their dead relatives transformed into a fox, the Chiriguano

/355 cont./

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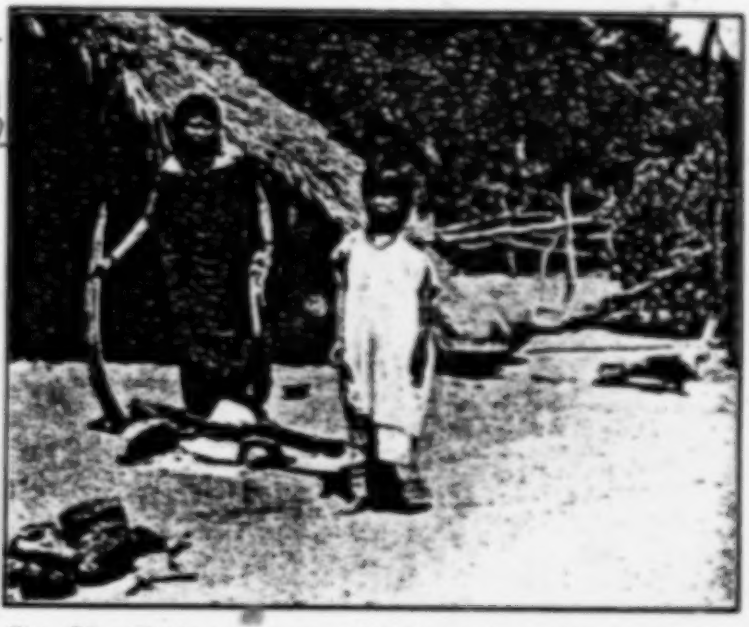

Fig. 26. Chiriguano woman lighting a fire. Upper Pilcomayo. (Photo. A. M.)

262
[775] do not hunt nor eat this animal (Diccionario Chiriguano-Español, etc., p. 3).

[756] Medicine men cannot under any circumstances eat pimento. If a man refuses to taste this condiment, one can be sure he is a magician (id., p. 184).

[765] Grilled corn is strictly forbidden for persons in mourning, whose tears would dry up if they ate this dish.

[825] the exclusive right to eat deer meat, which thus instilled in them
[769] the agility and suppleness of this animal. Women could eat, without

262 [562] /*355 cont.*/ Women could eat, without harm, parrot, a heavy and stupid bird. In their misogyny the Chiriguano doubtless figured that that would not change their nature in any way. (Campana, p. 92.)

252 Cooking is not a secondary activity: it is an important form /Fig. 26 appears here/ of the material culture and an excellent index for judging the cultural level of a human group. The art of preparing dishes reveals as well as any tool the faculties of invention and taste. In South America one can very well classify the tribes according to the more or less great variety of their dishes and the care they take in preparing them. This hierarchy would certainly correspond to that of the cultural elements.

[171] In the Chaco, Chiriguano cooking stands in contrast by its variety, its /*356*/ taste, and its cleanness to that of the more primitive tribes like the Toba or the Matako.

Before passing on to the study of the utensils used by the Chiriguano housewives, it is fitting to describe their menus.

When the Chiriguano kill a cow, goat, or sheep, the meat is boiled in water, roasted on a spit, or dried in the sun (*charqui*). They are especially partial to the head of the animal they kill, and they eat it boiled after skinning it. The pieces of meat are cleaned carefully before being cooked; and the tripe, for example, which is a delicacy, is taken out beforehand.

Corn is prepared in various ways. If the ears are tender and green, they are boiled in water or grilled over the fire or under the ashes.

When the corn is still in this state, the women prepare *simbikuai* or *humitas* (in Spanish). They bite with an appetite into the still tender ears, chew the kernels for a long time, and spit them into a calabash. This white mash saturated with saliva is wrapped in corn leaves and put under the ashes.

[415] The Chiriguano give the name of *atipû* to kernels of corn roasted in a special bowl called *tapuipe* (Plate XIII, 3) or in large potsherds, which tend more and more to replace the primitive utensil appropriate for this use. The *atipû* requires

/356 cont./

252 no preparation other than constant stirring in order not to be burned. This food takes the place of bread for the Chiriguano, who like to munch these crunchy and appetizing kernels. They provide themselves with it when they go on a trip.

Atipûi pounded in a mortar and passed through a sieve gives atî, a brownish flour which has an excellent taste. Atî is also prepared differently: kernels of corn are reduced to a flour which is roasted in a terra-cotta roaster or in a wide potsherd. According to Nino (p. 344), the name atikûi would be given to the kernels of roasted corn made into flour after being put through a sieve and ground until pulverized. The same missionary reserves the term atî for roasted flour obtained from the residue left by kernels which have been treated in the following way: after letting them soak in water all night, they are poured into a sieve the next morning. When the water has drained off, they are pounded in a mortar. This flour is now sifted, then roasted: cooked in water, it is the dish the Chiriguano call muintí or buinti. Atî then would be made with the residue from the muinti flour, which is ground again, then roasted like it, but first mixed with salt or pimento. I [122] have often eaten roasted corn flour which the Indians told me was atî, but I could never tell that it was seasoned. The Chiriguano give the name abatikuru to the corn bran.

This is how muintimimo is prepared: kernels of corn are /Plate XIII appears here/ /357/ put to soak all night. The next morning they are ground and sifted in an urupé (sieve with very fine mesh). The flour is poured into a muiteru [415] (Plate XIII, 1 and 2). This utensil is a terra-cotta basin whose bottom is pierced with holes like a skimmer (1). The flour is

[191] [114] 1. Linné (2, Map 1, p. 32) has given us the distribution of vessels with perforated bottoms throughout America. The enumeration he makes of them is very complete: yet it lacks mention of La Rioja in the Argentine Republic where Boman (1, p. 17) discovered fragments of vessels whose bases were entirely perforated like a sieve.

[TEXT CONTINUES ON P. 104]

Plate [illegible]

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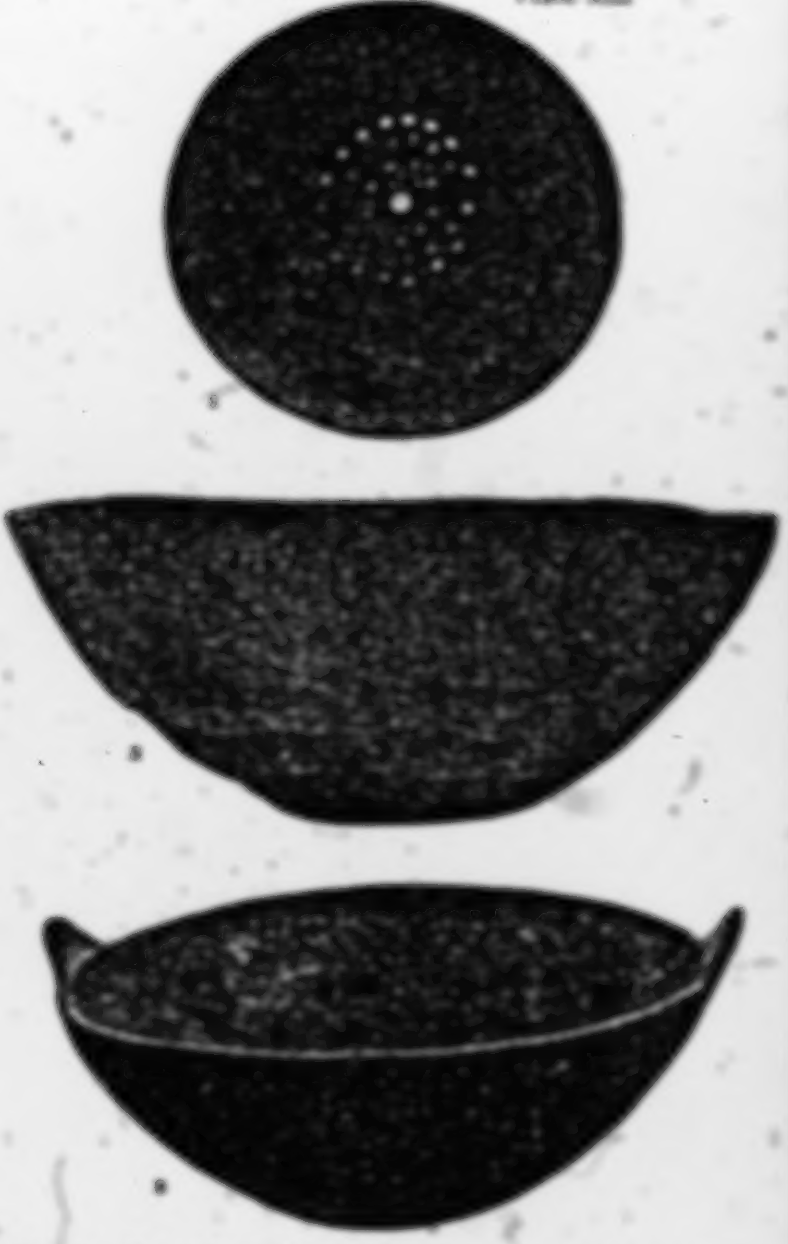

1 and 2 Basin with perforated bottom for preparing [illegible]. Flour cooked in steam. Prov.: Ibo. (1/4 nat. size.) -- 3. Basin for roasting corn kernels or flour ([illegible]). Prov.: Saladito. (1/4 nat. size.).

/307 cont./

252 covered with the husk. The maitere is then placed on the opening of a pot full of water and the whole put on the fire. The rising steam goes through the holes of the maitere and cooks the corn while saturating it with moisture. So that the steam will not escape at the sides, the line of contact between the edges of the maitere and the neck of the vessel is smeared with clay.

I have given the recipe for this dish according to Nino (p. 260), for I have never been present at its preparation. The Chiriguano themselves must have forgotten it: I do not remember having seen more than two maitere during my whole trip: one at Yumbía and the other at Ivo. Since it is im-[178] possible to prepare maintimimo without this basin, one must suppose that the Chiriguano of the decline have forgotten even the taste of one of the most original dishes of their cuisine.

At Ivo the Chiriguano had me taste käwi-rai (little käwi), a kind of gruel made with kernels of corn softened by a more or less long soaking in water, then pounded and rid of the bran. This gruel is cooked in water and eaten cold. It is [273] sometimes left to ferment for several days and from that has doubtless come its name of "little corn beer."

The Indians make flat corn cakes (mbuyape) (3), which are mentioned in the myths I have collected, but which I myself have never had a chance to taste. Avatindi, or white corn, is softened in water, pounded, then kneaded with salt and pimento and the dough shaped into flat cakes which are cooked under the ashes. When they are supposed to be done, they are pulled out from beneath the glowing embers and washed with water, and they finally have a kind of bread with a pleasant taste.

3. The corn fritters that I saw roasted in a frying pan at Pípi were doubtless mbuyape cakes. Unfortunately, I was not able to learn their name.

/357 cont./

252 A rudimentary way of preparing corn, but also little valued, consists of boiling the kernels in water for a long time until they have become soft (atiruru) (3).

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3. Atiruru is a dish whose consumption is intimately associated with the observance of magico-religious prohibitions. It is the only permissible nourishment for girls when they have their first menstrual periods, for people in mourning, and for women for a period of ten days after giving birth (Diccionario Chiriguano-Español, etc., p. 14).

252
262 /358/ The Chiriguano make a broth with corn-flour (api) and meat, which is not bad.

They do not use haphazardly the 11 varieties of corn which they cultivate. Each, according to its properties, is intended for the preparation of a definite dish. Yellow corn (avati-hendi-vaé or avati-iyu-vaé) serves for making chicha or corn beer; white corn (avati-ndi) is roasted, as is avati-kanana. The corn called katšintši, or crinkled corn, is generally roasted, as are avati-tšore and avati-saimpini (gray corn), which are intended to be roasted and made into flour.

262 Avati-rai, or small corn, is planted only in times of scarcity when the harvest has been bad. Of small stature, it yields only one ear of reduced size, but has the advantage of growing fast (Nino, pp. 241-242).

A Chiriguano's meal in normal times is not made up exclusively of corn, even if this grain figures in all his menus. The popularity which corn has is also shared by beans, or kumanda. The Chiriguano cultivate 11 varieties of them also.

The Chiriguano eat beans either dry or fresh. In the
[252]
[263] latter case they are cooked in the pod in water or under ashes. Beans boiled in the pod are seasoned with pimento. Then one has the dish called sopiriwa.

/358 cont./

252 In order to shell dry beans, the women make a big pile of them which they put on a hide; then, sitting down beside it, they hammer them with a stick as if with a flail. The seeds are loosened, and to separate them from the pod they take handfuls which they winnow (Fig. 27). They carry out this operation several times until not a single seed is left sticking to the pods. Next they collect them into a pile with a small broom and rid them of all impurities by shaking them in a sieve. The shelled beans are kept in vessels.

At Carurutí every morning I was offered a dish of beans cooked in the following way: a handful of beans, with a little water, was put on the fire in an improvised frying pan formed out of a large potsherd. In an instant the water was evaporating and the beans beginning to smoke; this was the moment to take them off and serve them.

The underground oven, which among other American tribes is used almost exclusively for cooking meat, has been adapted by the Chiriguano to a more humble use: in a hole which they make in the ground and which they have first heated, they bury fresh beans and leave them until they are done (Nino, p. 243).

262 After beans in order of importance come squash or gourds
252 (andai ankú, and ginda). The Indians boil them or roast them
under ashes. In the first case they season them with pimento
[263] or salt to make gindaka-mikira, or squash fat. The /359/
seeds are also roasted and eaten with corn flour, atipíi, or beans.

The Indians of the Caipipendí valley sometimes, but rarely, ate sweet manioc tubers. They boiled them in water or roasted them under ashes.

Sweet potatoes or camote (in Chiriguano: yeti) are roasted or boiled. They were served to me only two or three times.

/Fig. 27 appears here./

263 The Chiriguano like condiments and season all their vegetables with them; in the bean pot they put pimento, which with them occurs in the form of extremely strong small oval fruits, green and red. I have also seen ground red pimento. In the villages where the Indians use crystallized salt, they break it into small

/359 cont./

263 pieces which are put near the fire to make them melt little by little. The cooks dip them from time to time into the soup, then take them out. If the salt is taken from salt marshes or from water by evaporation, /360/ they mold it into large balls which are scooped out as needed (Fig. 28).

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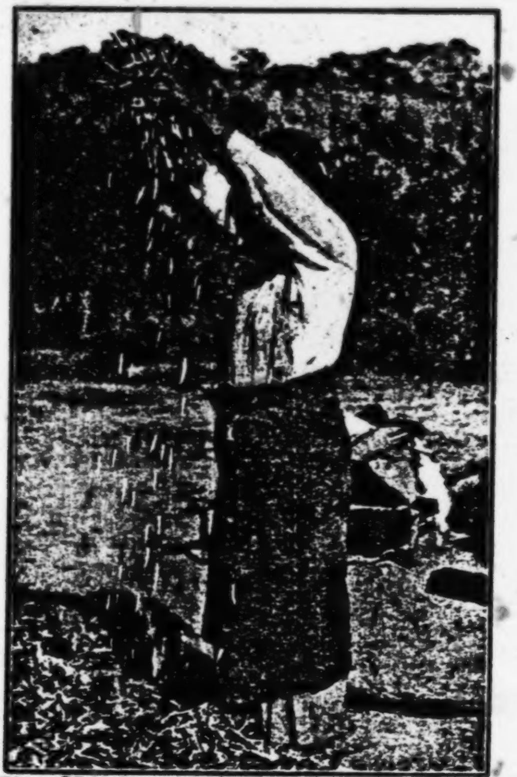

Fig. 27. Young Chiriguano woman winnowing beans. Carurutí. (Photo. A. M.)

317
263 The major part of the salt exploited in Chiriguano country comes from a mine situated in the San Simon region, between San Luis (Entre Rios) and the Salado River, in the department of Tarija. The Indians flock there from all directions with droves of donkeys which set out again loaded with big blocks of crystallized salt afterward cut into small pieces. [484] [492]

Tupinamba S09

/360 cont./

C 263 317 The Indians of Ibopeytí, although living in the neighborhood of the San Simon salt mine, consume it in the form of the big balls which I have just mentioned. Pulverized, it is a salt which reminds one of our table salt but coarser. The inhabitants of this village assured me that they used to find it near the Pilcomayo. That is very possible, for the rivers which flow in the region are very salty as their names indicate (Río Salado, Saladito, etc.). These rivers, which frequently overflow and often change their beds, must form here and there real salt marshes. The Chiriguano of Ivu and Machareti collect the water from a salt spring, boil it, and by successive coolings obtain salt which they mold into balls (Campana, p. 89).

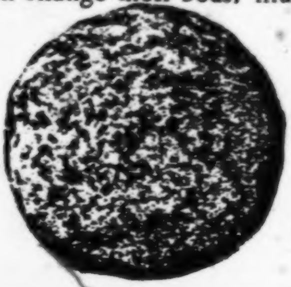

Fig. 28. Salt molded in a ball, ready to be consumed or exported. Prov.: Ibopeytí. (1/2 nat. size±.)

C 263 The Chiriguano are parsimonious with their salt. I did not see them salt anything but dried beans; and when the latter are cooked in the pod, they are served that way without condiments, the same as corn or squash.

C 264 When a Chiriguano woman offers you a dish of beans or meat, she always puts some corn flour beside you. It is not easy to eat it according to the rules; the Indians take great pinches of it between their fingers and throw them into their mouths with marvelous dexterity. Upon seeing them so adroit, T 175 264 I thought of their ancestors from Brazil, the ancient Tupinamba and Guarani, who excited the hilarious admiration of the first navigators: "But however that may be, our Tououpinambaoults, men and women as well as children, being accustomed from childhood to eating it (manioc flour) completely dry instead of bread, are so used to and trained for that, that taking it with

Tupinamba S09

T /360 cont./
175 their four fingers from the earthen dish or other vessel in
264 which they keep it, even though they throw it from rather far
away, nevertheless they put it so accurately into their mouths
that they do not drop a single bit. So that some of us French-
men, wishing to imitate them, thought we would eat it in that
fashion, and not being at all trained for that like them, in-
stead of throwing it in our mouths, we discharged it on our
cheeks and floured our whole face; /361/ consequently unless
those principally who wore beards would have wanted to be
accoutered as players of farces, we were constrained to take it
with spoons" (Léry, Vol. I, pp. 143-144).

T
262 This comparison permitted me to suppose that roasted
252 corn flour has simply replaced the "farinha" of the Brazilians.
264 As we know, the pulp of manioc tubers, after being carefully
squeezed in the tipiti, or trough, was roasted on a terra-cotta
slab and changed into dry flour, with which the Tupinamba
C accompanied all their meals. The Chiriguano think the same
262 way about atši: they say that corn flour, in order to be eaten,
264 must have an accompaniment, an intina. To my way of think-
176 ing, atši and muínti are two substitutes for manioc flour that
the Chiriguano invented or adapted after emigrating into a
C land where bitter manioc was unknown. Neither the other tribes
[171] of the Chaco nor the Quichua eat corn in this form, and, to my
knowledge at least, there is no doubt that the Chiriguano
introduced these two dishes into the country, without counting
a goodly number of the ones which have been enumerated.

C The only fruits that the Chiriguano consume on a large
262 scale are the prickly pear or tuna (Opuntia), which are seen
C in all their villages. They also plant some fig and orange
[245] trees when they are under mission influence. They are also
[797] great lovers of melons, of sandias (watermelons), and when
they have eaten one of these which has pleased them particularly,
they keep the seed. They love sugar cane with a passion.
Sorghum is especially meant for the children, for whom these
graminaceae are a veritable sweetmeat. They suck the juice,
which is as sweet as that of sugar cane.

/361 cont./

262 252 Among the foods that nature gives them spontaneously can be counted the caraguatá, whose mealy roots, roasted on embers or under ashes, remind one a little of manioc tubers.

The pods of a mimosaceae (?), which remind one of large beans and for this reason are called iwira-kumanda, were pointed out to me as being edible. I have found this information confirmed in an article by Campana (p. 97), who adds that these fruits have a bitter taste which they lose only after several repeated cookings.

To this list must be added the fruits of the algarroba, mistol, tusca, bitter algarroba, ulala, higuerilla, etc. Chañar fruit can also help them to stand famine. Since they are sweet, they can be eaten raw, cooked, or in the form of bread after being pounded in a mortar.

In Father D. Giannechini's Diccionario Chiriguano-Español, etc., one finds enumerated a large number of plants which grow wild and which the Chiriguano eat by necessity or to vary their menus. These are:

/362/ The roots of the kaaratiro, red and stringy outside but white inside. They are edible and even pleasant tasting after being cooked in three waters (p. 18).

The watery tubers, of the size of a small onion, which the Chiriguano call iwía and of which the children are very fond. One belief has it that the spirit inhabiting this plant hides it from those who look for it if they do not observe silence or if they point at it (p. 80).

The fruit of the shrub iwira-rorai (p. 82).

The tubers of a kind of wild yuca which they call, like the cultivated species, mandío or mandionsi. This is a bitter plant, prickly and poisonous. To eat this root they cut it in pieces and cook it in several waters to make it lose its sharpness and its poison (p. 99).

A kind of wild potato known by the name mangara which the Chiriguano dig up and eat in times of scarcity. This tuber is edible only after being boiled in several waters (p. 100).

The herb monki would be equally edible (p. 133).

A certain liana (supúa) whose leaves can be eaten if other food is lacking (p. 193).

/362 cont./

262 [252] The Chiriguano call kumanara a leguminous plant, wild, which resembles the yuca and which can serve as food after being boiled. They resort to it only when pressed by hunger. The word designating this plant has a strange resemblance to [192] the name of the batata in the Quichua dialects of Ecuador and northern Peru (Rivet, 3, pp. 583-590). It is perhaps a question of a Quichua word introduced into the Chiriguano language to designate a plant of which they did not have the equivalent in their original homeland. The case is nevertheless rare, and one can wonder if it is not a simple coincidence.

[222] [171] Neither do the Chiriguano look down on honey, although they do not seek it with the passion of their cousins, the Kainguá. What I tasted among them was contained in thin honeycombs having the consistency of cardboard. It had a pleasant taste.

222 784 Any Indian who goes in search of honey (ei) must not make his intention known to anyone and, if he is asked where he is going, he must answer: "To look for wood." If you do not take [776] these precautions, the protecting spirit of the honey is warned of your plan and hides the honeycombs he guards (Diccionario Chiriguano-Español, etc., p. 86).

222 114 The missionary Corrado (p. 43) assures us that grasshoppers, cicadas, the larvae of bees are that many delicious [252] dishes for the Chiriguano. He adds that these insects are roasted. Nino (p. 247) reproduces the statements of his predecessor and completes the list of strange foods by adding /363/ ants, lizards, leaves of the cucurbitaceae, melted tallow, etc. Personally I [171] have never seen the Chiriguano touch these dishes strange to our palates, but I am all the more inclined to believe these two missionaries that the tastes they indicate are actually those of the Indians in other regions.

262 252 Already in the 16th century the Chiriguano passed as snake lovers, even of poisonous species. They cut off the head and tail, skinned them, and roasted pieces of them on live coals. They used to eat them with pimento. No doubt the Spaniards con- [178] fused snakes with iguanas, which even today the Chiriguano justly like (Lizárraga, Vol. I, p. 260).

/363 cont./

234 To end up, one could still cite among Chiriguano food
262 the cheese they make in some villages. Each time they
butcher they take care to keep the abomasus in order to make
[177] milk separate. Chiriguano cheeses are of the same quality as
those of the half-breeds, who for once have taught something
[272] to our Indians. I shall add that I have never seen a Chiriguano
drink milk.

312 The problem of water does not come up for the Chiriguano
133 as for the other Indians of the Chaco. Numerous rivers cross
their territory, and several of them are large enough not to dry
up even in the middle of the dry season. These watercourses
form innumerable *quebradas*, gorges or valleys, which give
its characteristic aspect to the country inhabited by our Indians.
[361] Sometimes villages are built near springs or small lakes, like
the Ivu mission, which is provided with plenty of water.

312 When I crossed the Caipipendí valley, the river which
occupies the bottom was nearly dry. The Indians had scooped
out small wells about one meter in depth in the sand of its
bed. They had surrounded them with slabs of stone to prevent
any caving in and to preserve the water which accumulated in
them from the heat of the sun. In this same valley, in a village
situated on top of a hill, the Indians had dug a cistern four to
five meters in diameter in which rain water had collected.

271 The Chiriguano have found a way to purify the muddy
312 water they often have to drink. They crush *caraguatá* leaves
824 between two stones, then steep them in the water, and all its
impurities settle as a result of the action of the juice of this plant.

264 The Chiriguano do not eat at set times. They make a
rather substantial breakfast very early in the morning and again
take some food toward the middle of the day. In the evening
[562] about six o'clock they make a kind of dinner. Since the men
are served first, then the women and children, it follows that
the meals drag out in length. At any moment of the day one
[415] can see someone eating. The food /364/ is presented to each
one in a calabash or terra-cotta bowl which each holds on his
knees. They pick up the pieces with their fingers but imbibe
liquids with a wooden spoon (Figs. 42 and 43). After eating,
they wash their hands. I have seen some rinse out their mouths.

/364 cont./

Fermented Beverages

293 [122] [123] Anyone who has traveled among the Chiriguano or the Chané has learned to prize corn beer, or kãwi. Few moments in the course of my expedition have left me more pleasant memories than the ones when, tired by a long stage, I would sit down in front of a hut and receive from the hands of the wife of the "captain" a calabash full of this liquid, slightly sharp and a little granular, which quenches thirst and allays hunger. The day when the Chiriguano stop making kãwi will be a sign that they have disappeared from the face of the earth, and perhaps this delicious drink will survive them as a creole speciality in which good nationalists will take pride.

Father Corrado (p. 43) once heard from the mouth of a Chiriguano an admirable definition of the role of kãwi in the life of an Indian: "It is our father and our mother," said he. Indeed, it is the father of joy, the sign of plenty, the companion of the most beautiful moments of existence as well as the most tragic ones. It has within it a mysterious and mystic force which penetrates the individual, exalts him, and protects him against supernatural dangers. All festivals are reduced, in their essential part, to the consumption of kãwi; no collective enterprise is conceivable without their first drinking it from full jars (1). From birth to death, all that affects the

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293 726

1. Even in the 16th century the Chiriguano, like the ancient Tupinamba, did not undertake any expedition of war without having celebrated a caouin or a vin /wine/, to express ourselves like the old French chroniclers; /a passage of poetry in Spanish from Barco Centenera, p. 262, is omitted in the translation/.

When the Chiriguano of Parapití and Caipipendí rose up in 1799, before the revolt they held great drinking festivals, during the course of which they decided on the plan of operations (Corrado, p. 254).

/364 cont./
273 life of the individual or the community is associated with this
beverage. The divine principle which kãwi has in it does not
take away its secular character; and, while one gets drunk on
it during the festivals, nothing prevents washing down meals
with it at the time when the corn ripens. As a sign of
[574] hospitality every stranger is invited to empty a calabash full
[576] of it; and the compliments he addresses to the wife of his
host fill his heart with pride.

527 The Indians always appreciated the liking I showed
273 /Plate XIV appears here/ /365/ for kãwi, and my old friend
[123] Karnapadyú did not fail to recall the big vats full to the brim
to persuade one to return to celebrate Easter with them, or,
if you like, the corn harvest, since these two dates coincide
more or less. Such promises /Fig. 29 appears here/ could not
remain without effect, and Karnapadyú was not at all surprised
to see me arrive shortly before the festival.

The greatest animation prevailed in the village of
Carurutí, formerly so calm. Men came and went, bending under
enormous loads of wood. All the urns were lined up in front
of the huts and buried to a third of their height (Plate XIV, 1).
527 For a long time big piles of corn had already been heaped up
273 in the village, which all, big and small, men and women,
243 /Fig. 30 appears here/ were actively engaged in husking.
[412] Some used their fingers, others knives or a pointed stick. Not
[413] one had thought of the so practical instrument used by their
ancestors: a small wooden peg with a leather loop to put two
fingers through. It is curious to note that such a simple object
fell into disuse; an old man still sold me a specimen made
of iron but a close copy, so to speak, of the wooden prototype,
of which it reproduced the smallest details (Fig. 29).

273 Now the hardest work begins: the grinding of the kernels.
Day and night the dry noise of the pestles crushing the corn
[461] resounds in the village. Often, to get the chore over more
quickly, three women group around the same mortar and with
surprising speed raise and pound their pestle without a single
[415] error in rhythm interrupting their laborious work. Once ground,
the corn is sifted in an urumpesa or large-meshed sieve (Fig. 31).
The rather coarse flour is poured into large urns filled with water.

Plate XIV

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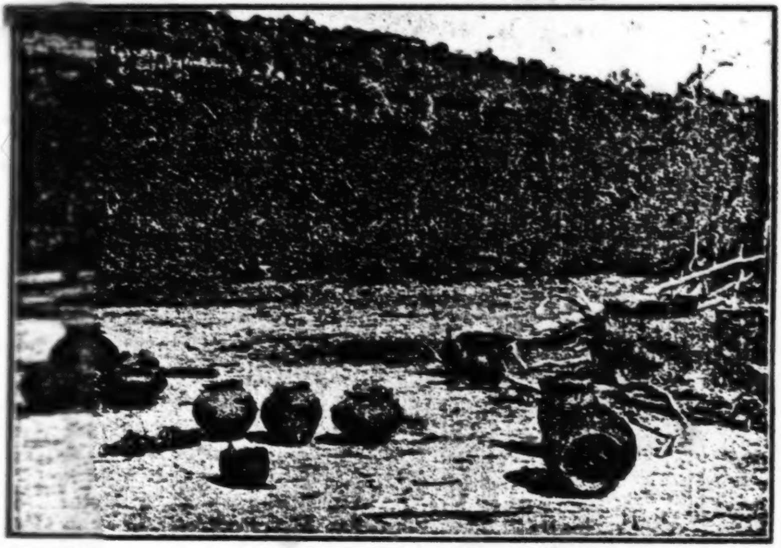

1. Vessels assembled in front of a hut and serving for the preparation of kãwi (chicha). Carurutí. (Photo. A. M.)

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2. Women and children taking kàwi. The women are squatting on the ground on skins, while the men are seated on benches or chairs. Samirenda. (Photo. A. M.)

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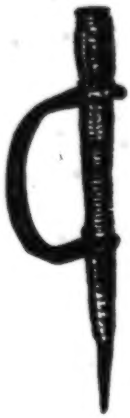

Fig. 29. Iron peg with leather handle used for husking ears of corn. Chiriguano. Prov.: Saladito. (1/2 nat. size.)

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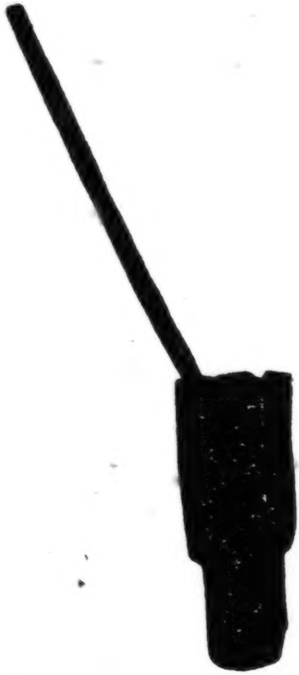

Fig. 30. Chiriguano mortar (*anguá*) made of *urundey* wood (*Astronium urundeuva Fr. Allemao*), with its pestle. The lower, recessed part is buried in the ground. Prov.: Ivu. (1/15 nat. size.)

/365 cont./

273 The preparation of chicha is not play: it is necessary not
only /366/ to grind an enormous quantity of corn, but again to go
484 ceaselessly to get water, often at a great distance. At Cururutí
482 the nearest potable water was at the bottom of a ravine of particu-
273 larly difficult access. The women were constantly going there
with an îru (Plate XVII, 1),[1] which they carried on their backs in
a net (añapoka) held on the forehead by a strap. They would fill

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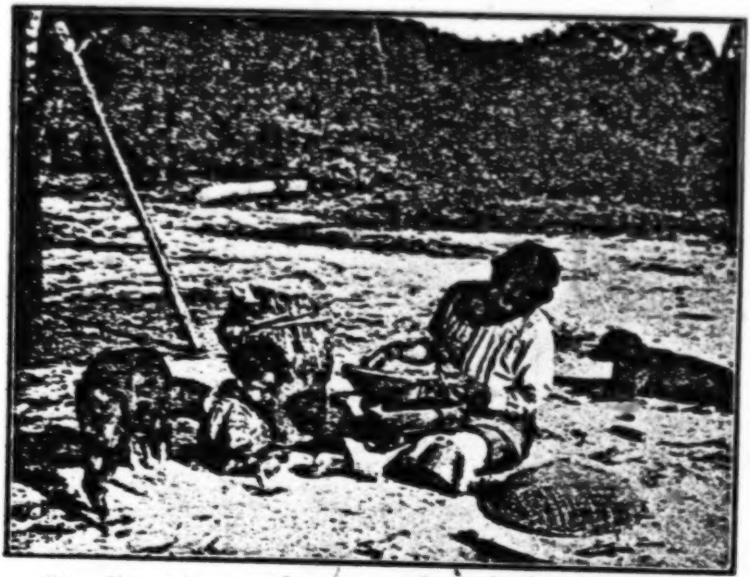

Fig. 31. Woman sifting corn which she has just ground in the mortar beside her. This flour is to be roasted, then chewed to serve as ferment for kãwi. Carurutí. (Photo. A.M.)

484 the jug and, loading it with difficulty, would go back up the
482 steep slope doubled over under the weight. So as not to lose any
273 time, these hard-working creatures would take along a calabash
full of ground corn which they continually chewed.

273 The ground corn is cooked in water and constantly stirred
412 with flat sticks whose edges used to be cut out with a certain
[178] artistic care in olden days (Fig. 32). Today a kind of oar (Fig.
[237] 33) or the scapula of an ox (Fig. 34) fastened to a long handle
[531] replaces the ancient utensils in which was manifested so well the
Chiriguano tendency to decorate even the most humble objects.

[1] [For plate XVII, See category 116, P.127--Analyst]

/366 cont./

273 126 It is not so easy as one thinks to observe in detail the preparation of kãwi, and I am still at a loss to describe the stages in their exact sequence. This difficulty is due to the fact that kãwi is prepared over several days (generally three or four), and it is /Plate XV appears here/ /367/ difficult to be on the spot all the time so as not to miss any detail. Besides, as different families do not begin to prepare kãwi at the same time, confusion results; and it [114] is hard to know at what point of the operation one finds oneself. Apparently I am not the only one to have come up against this obstacle, for it is enough to read the various descriptions devoted to this important occupation to become aware that they are far from agreeing.

273 462 At the moment when the water is at the boiling point in the big vats, the burning pieces of wood and the live coals are scattered, and the corn flour is poured in, being stirred vigorously so that it will not form lumps. While this operation is performed, other women have pounded fine a certain quantity of corn, sifted it, winnowed it to rid it of any impurity, then roasted it in a large potsherd. As this flour is taken off the fire, the women chew part of it and spit this into a [412] → calabash. This paste impregnated with saliva is called temišu. According to Nino (p. 248), the Indian women mix the temišu with the corn broth which is cooking in the vats and with which they fill a pot. The woman who busies herself with this mixture (umopirai) allows it to fall back in from a certain height "to give it sweetness."

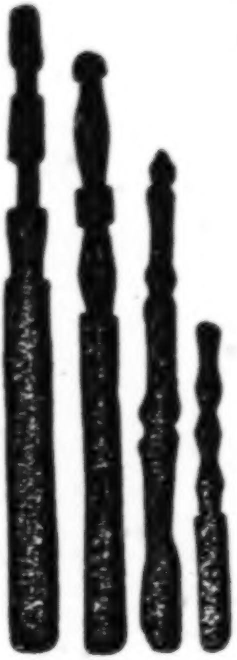

Fig. 32. Sticks for stirring the kãwi while it is cooking. No. 1 comes from Tigũipa; No. 2 from Ivu[illegible] Nos. 3 and 4 from Sa[illegible] (upper Pilcomayo). ([illegible] nat. size.)

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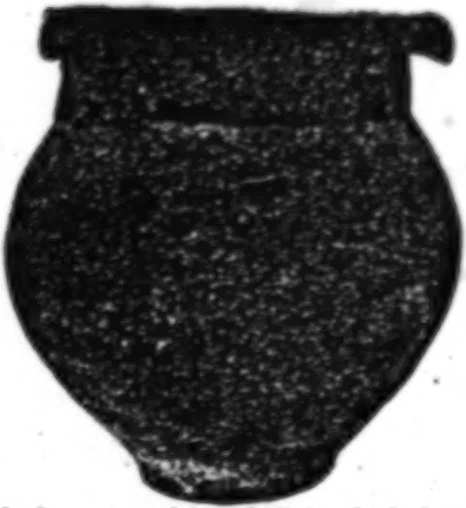
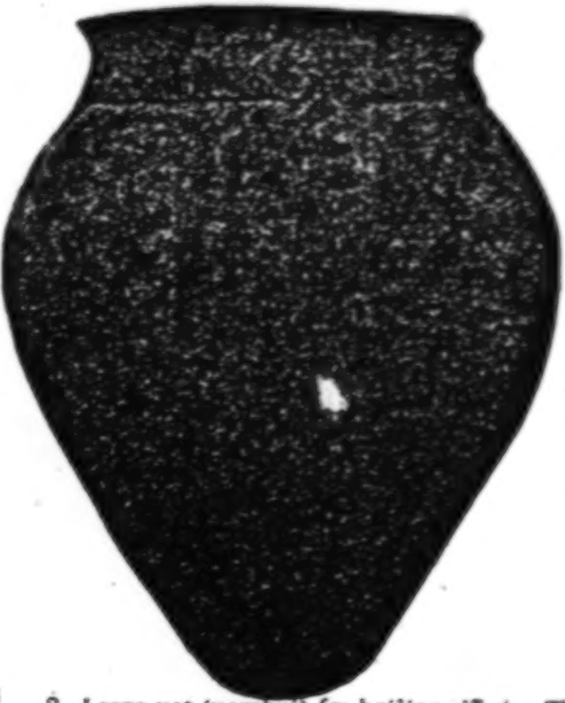
Plate XV



1. Large vessel (yambui) in which the Chiriguano make corn beer ferment. Prov.: Ivu. (1/5 nat. size.)



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2. Large vat (yambui) for boiling kãwi. The Chiriguano bury their dead in similar urns. Prov.: Ivu. (1/7 nat. size.)

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The umapirai is added to the kāwi, which from this moment on is subjected to intense cooking. A large, bright fire is lighted around the vat containing it and burns day and night; the women go to stir it from time to time to keep it from sticking.

At night the village of Carurutí has a strange look: over the open square in front of the huts high flames rise, against which are outlined in black the silhouettes of the women who, busy and hard-working, do not take time to sleep. The next morning the fire is allowed to go out and the kāwi to cool. It is then decanted into vessels of smaller dimensions, and all the women, including little girls, assemble to take handfuls of the marc and chew it, one trying to outdo the other. These balls, sticky with saliva, are spit back into the vessel. A rather large amount of cold water is added to the kāwi, and right afterward comes the bottling, if I may so express myself. The kāwi is strained through a very fine-meshed sieve. The marc, or tiripi, /368/ is thrown away or used again. The beer, or pale wine, is distributed into vessels which are carefully closed with a calabash or bowl, and this liquid is left to ferment for two or three days. So that it may be completely protected from the air, the line of contact between the vessel and its cover is smeared with clay.

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Fig. 33. Oar for stirring kāwi during cooking. Prov.: Pípi. (1/9 nat. size.)

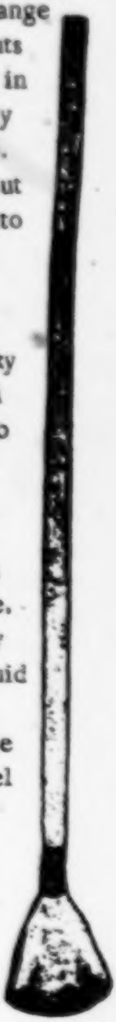

Fig. 34. Shovel ending in an ox scapula which the Chiriguano use for stirring kāwi. Prov.: Pípi. (1/10 nat. size.)

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A certain variety of kāwi is prepared by boiling it again after passing it through the sieve and "bottling" it only after letting it cool a second time.

Kāwi is generally covered with a thick oily layer which the Indians are far from scorning. The mistress of the house takes the precaution of pouring a certain quantity of it into the vessels which do not have any.

In their descriptions of the preparation of kāwi, Giannecchini and Nordenskiöld say nothing about the temišu, the umopirai, and, in general, a good many of the stages the corn goes through before being converted into beer. This silence is probably due to the very complexity of this operation, more than one detail of which certainly escaped them. The preparation of kāwi is a tiring occupation which requires great effort. The Indians display a veritable science in its manufacture. It is easier to distill alcohol, and, in any case, this is a task demanding less physical activity. Perhaps centuries of groping were needed for arriving at determining the time of cooking, the proportions of roasted and chewed flour, the quality of the grain, etc. All that is the result of minute observations, many trials, and also much reflection. These considerations are intended to justify the remark made at the beginning of this chapter: a simple cooking recipe often tells as much about the civilization of a people as a perfected tool.

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/369/ The fruits of the mistol, chañar, or algarroba can give a chicha that the Chaco Indians like very much, but which the Chiriguano scorn. They have recourse to it only in case of scarcity.

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[273]
[824]
[114]
The Chané of the Izozoc, whom I could not visit, have the specialty of kāwi from batatas. The Chiriguano also know how to make use of this tuber to prepare a fermented drink, but they judge it to be of inferior quality and declare that one must be a poor devil to take any. (Nordenskiöld, 2, p. 236) (1).

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1. Barco Centenera (p. 315) already mentions the different types of chicha prepared by the Chiriguano: "El vino de maiz y de algarroba.

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De Molles, y de murta bien obrado,
Seguro que bebian casi arroba,
Que media á cada cual le estaba dado."
/The wine of maize and of algarrobo,
Of Molles, and of myrtle well worked,
It is certain that they drank almost
an arroba,
The measure which was given to each
one./

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574
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[123]
[114]

Käwi is too respected a drink to be drunk in any old way. Etiquette requires one to comply with certain rules if the honor of participating in a drinking bout is done you. I sometimes had a chance to be invited to these festivities, and on such an occasion I was able to make the following observations which I am setting down just as I noted them in my field notebook. The men are seated in a circle on chairs or benches. The women squat behind them, on skins spread out on the ground. [554] The käwi is brought in vessels shaped like bulls, and one of them is put down at the feet of the "captain." The girl who has brought it fills a small calabash and offers it to the "captain," who empties it. Next he serves me and gives the vessel back to her. He does the same with my neighbor, then with several of the guests. Then he hands the calabash to his wife and goes to sit down. The latter serves the rest of the men present.

A second vessel, brimming over with käwi, is put this time before another Indian who perhaps is held in some esteem. He drinks first, then busies himself with his companions. Two large calabashes are then given over to the women, and from that moment on, the distribution no longer seems to follow any order. Men and women drink and serve their neighbors without obeying any rule of decorum other than not to forget other people. They acquit themselves perfectly in this duty of politeness, and nobody is neglected, not even the very small children, who take alarming quantities of käwi.

/375 cont./

293 574 576 [554] At Saisirenda on Easter Day I was able to note that the first one served is always the "captain." As before, the vessel full of kāwi is put down at his feet. He drinks the first bumper, then hands his cup or calabash to his neighbor. The latter gives back the calabash empty or fills it and passes it on in his turn. Several calabashes are circulated, but they always come back to the first person who received each one and he finishes it. The men move from their places several times to go to serve the women who, on their part, do not forget themselves and drink according to the same /376/ [533] ritual as the men. The drinking takes place to the sound of flutes and violins.

When the supply of kāwi is exhausted in a village, they get in single file and, the music at the head, go elsewhere to revel.

[789] [198] [302] Formerly the preparation of kāwi was accompanied by magic rites. Today nothing is left of this but the custom of daubing the face and legs with roucou. In certain villages the women do not even take this precaution any more. However, between Cururuí and Caipipendí, I could still see several women stained like this, who seemed "handsome devils," to use an expression dear to Jean de Léry.

415 Notes on the Cooking Utensils Used among the Chiriguano

Nothing strikes the traveler who arrives in a Chiriguano village so much as the abundance of pieces of pottery he finds inside or outside the huts. Figure 1 of Plate XIV /see p. 115/ gives an idea /Fig. 35 appears here/ of the number of vessels one can see in a small area at the time when the Indians are preparing corn beer.

Pottery for culinary use among the Chiriguano has a completely different nature from that for ceremonial days. The [172] [178] latter is clearly of Andean origin with a few rare Arawak elements, while the former has retained a very marked Guarani character.

/176 cont./

415 531 It is distinguished especially by finger impressions, which decorate the neck of nearly all the common pots.

323 While watching the Chiriguano potters work, I realized that the finger impressions which so often decorate their vessels result automatically from the process of fabrication. At the moment when the potter forms the neck of the vessel, she has to press the roll constituting this part between her thumb and index finger and no longer with the flat of the hand as she has done up until then. The vessel is generally too narrow in this zone to allow putting in the whole hand. The result of this is a whole series of finger impressions which vaguely give the effect of ornamentation. Now the potter rubs them out in order to remake them more symmetrically. Thus this motif which adorns most of /Plates XVI and XVII appear here/ /177/ the vessels in common use among the Chiriguano is obtained, so to

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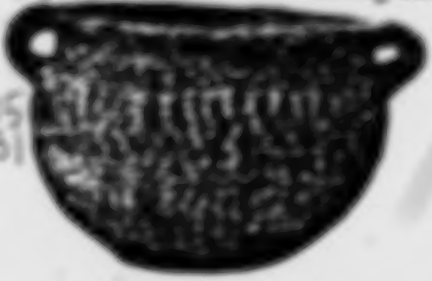
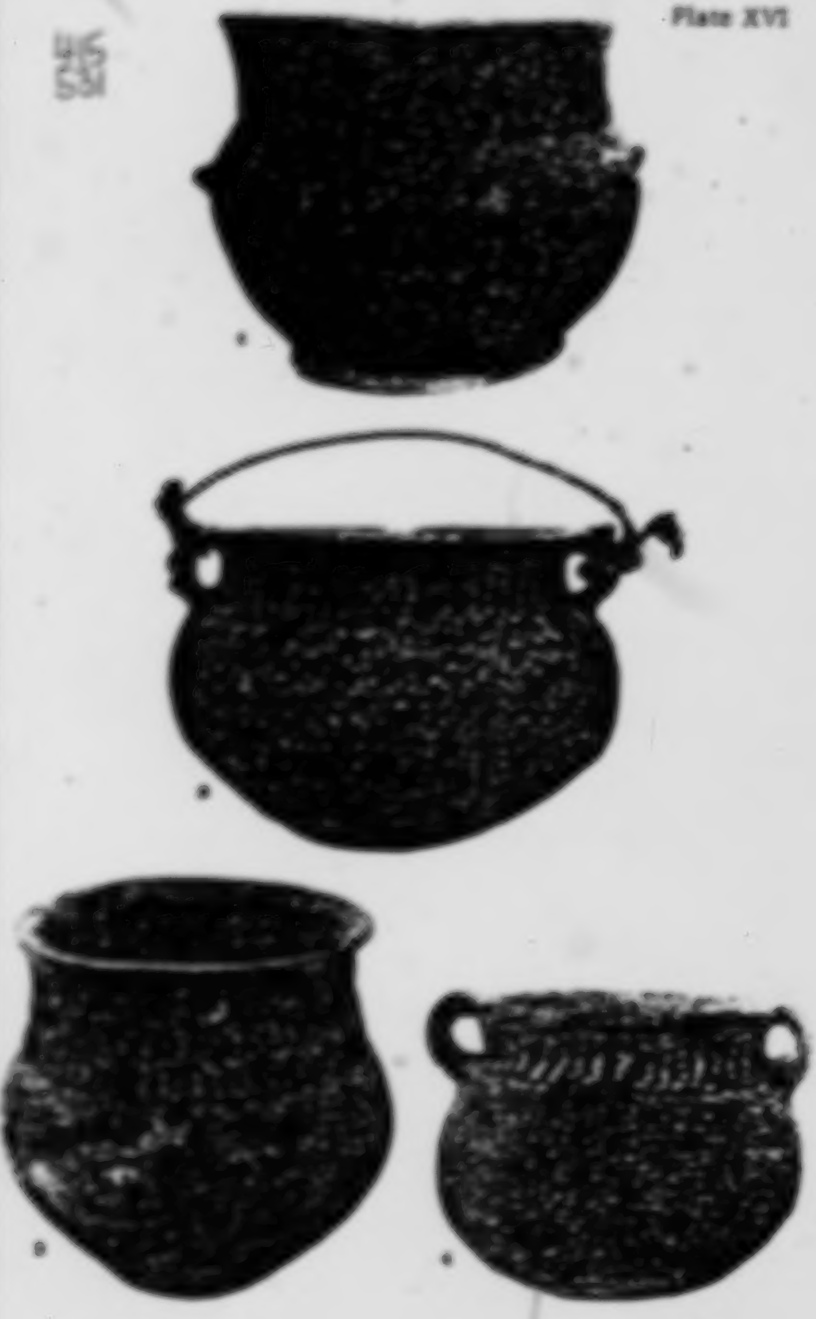


Fig. 35. Small vessel ([illegible]) decorated with fingernail impressions. The lines of contact between the three coils of clay of which it is composed are still visible. Prov.: Caraparí. (1/3 nat. size.)

323 say mechanically. From the neck these decorations have been extended to the rest of the vessel for an aesthetic purpose, but their occurrence on the upper part influenced the rest.

Plate XVI



/Caption on following page./

/Caption for Pl. XVI on preceding page./

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1. Cooking pot (yapepó). On the neck: fingernail impressions. Prov.: Ivu. (1/3 nat. size)

2. Vessel (yapepó) with twisted handles and decorated with incised triangles. Prov.: Saladito. (1/3 nat. size.)

3. Cooking pot (yapepó) decorated with fingernail impressions. Prov.: Ivu. (1/4 nat. size.)

4. Cooking pot (yapepó) decorated on the neck with fingernail impressions. Prov.: Ivu. (1/3 nat. size.)

Plate XVII

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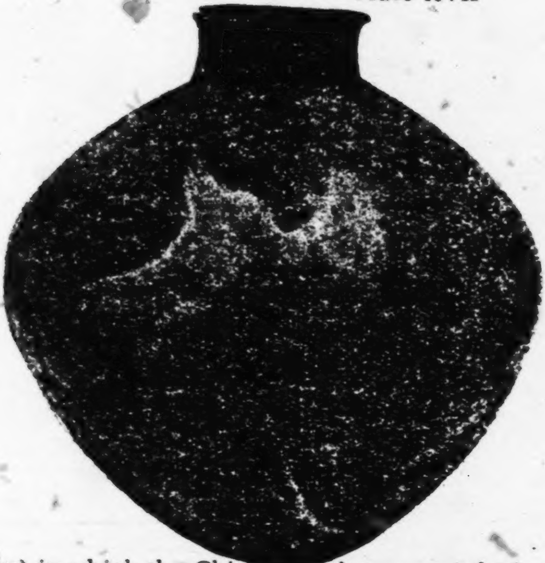
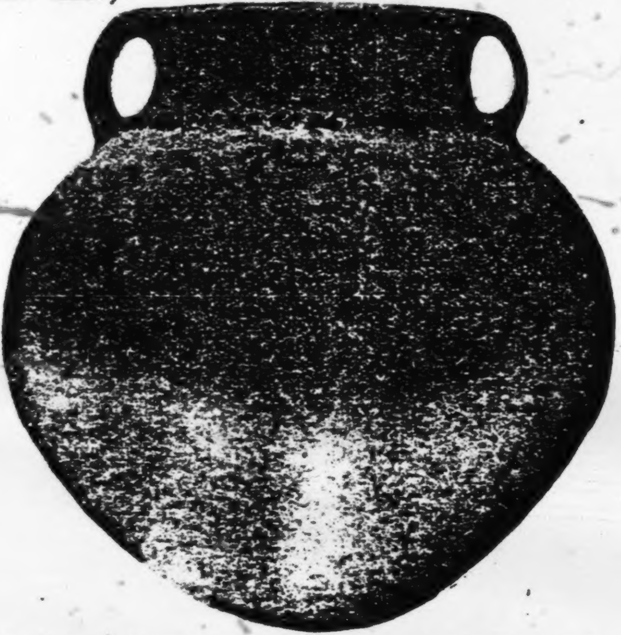


1. Vessel (îru) in which the Chiriguano draw water for household use. This specimen comes from the Chané village of Tuyuntí, near the Aguaray (Salta Chaco, Argentine Republic). The neck is decorated with fingernail impressions. (1/4 nat. size.)



2. Vessel (yambui) decorated with a series of cups /godets/ on the base of the neck. Prov.: Saladito (upper Pilcomayo). (1/4 nat. size.)

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/371 cont./

The ordinary pots used to cook the food are, as a general rule, decorated all around the neck with several rows of finger or fingernail impressions. The most typical example is the vessel of Plate XVI, 3 /see p. 125/ which typologically can be ranked with the big urns for cooking corn beer, many of which have more or less the same shape.

Ordinarily pots meant to go on the fire are provided with handles (Plate XVI, 2 and 4 and Fig. 36).

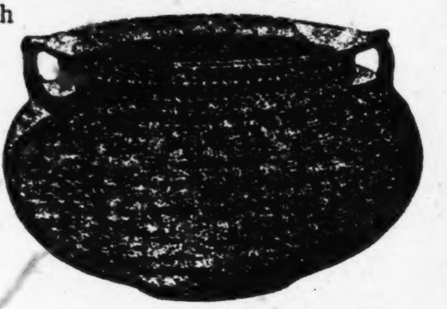

Fig. 36. Vessel (yapepó) with twisted handles and decorated with two series of small depressions imprinted on the neck. Prov.: Yumbía. (1/3 nat. size.)

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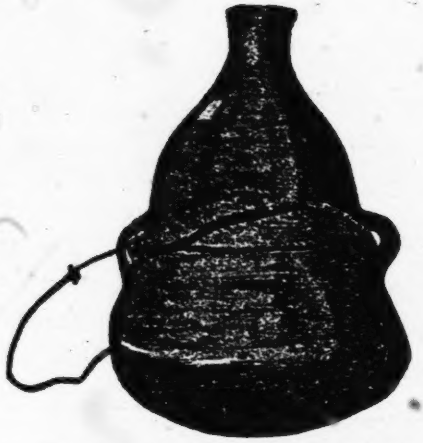


Fig. 37. Toba vessel in the shape of a flattened gourd. Serves for carrying water while traveling. Prov.: Macherotí. (1/3 nat. size.)

/371 cont./

415 Certain vessels (Fig. 35) have the exterior surface entirely
531 covered with these depressions obtained by pressure of the thumbnail. The Indians call this decoration *tatupire*, that is "armadillo carapace," /Fig. 37 appears here/ a completely justifiable comparison.

One can consider as an evolution of the process of ornamentation by finger impressions the angles or chevrons which decorate the outside surface of the vessel of Figure 2, Plate XVI /see p. 125/, which have been incised in the soft clay with a pointed instrument. This type of ornamentation can be reduced to its simplest expression; thus on the neck of the vessel of Plate XVII, 2 /see p. 127/ it is limited to a row of little cavities made with a pointed stick. The small vessel of Figure 36 /see p. 128/ with a belly flattened from top to bottom belongs, from the decorative point of view, in the same category.

415 On another vessel (Plate XVI, 1) the small nipples which
531 project /372/ all around the belly constitute a summary
171 decoration which completes that of the neck formed by fingernail impressions. Pots of this type are found among the Ashluslay (Nordenskiöld, 9, Fig. 65, p. 218).

This decoration is exceptional in South America. Jijon y Caamaño (p. 6) considers it characteristic of the northern part of Ecuador. He points out its distribution in Central America and in the Mound region in the United States.

[126] The *îru* of Plate XVIII, Fig. 2 /see p. 131/ has the exact shape of a calabash; this resemblance was intentional, for the Indian woman who sold it to me presented it at the same time as the calabash which /Fig. 38 appears here/ had doubtless served as a model. Vessels which are almost replicas of this specimen have been found at Jachal and Calingasta in San Juan province in Argentina (Ambrosetti, 1, Plate VII, and Debenedetti, 3, Fig. 41, p. 69).

415 The Chiriguano call the vessels in which the women
[462] draw the water they need for their households by the Quichua name *îru*. The *îru* are characterized not only by their more
415 or less globular shape and the narrowness of the neck on top,
323 but also by the quality of the paste from which they were

C /372 cont./

323 [415] modeled. The latter is extremely fine, of very good quality, and, when fired, forms a compact, hard, and resistant mass. This clay is inherently not very porous; to render it still more impermeable the Chiriguano potters give the vessel a long polishing while it is still unfired but nevertheless very dry. This is applied on the exterior walls of the receptacle and gives them a brilliant and metallic appearance which at first sight would be taken for a glaze. This operation has the effect of making the vessel almost impermeable and thus of avoiding the evaporation which takes place more or less rapidly in most Chiriguano receptacles. The narrowness of the neck at the top of these vessels serves a similar purpose.

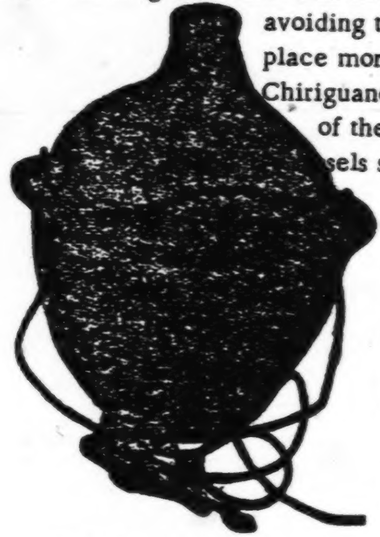
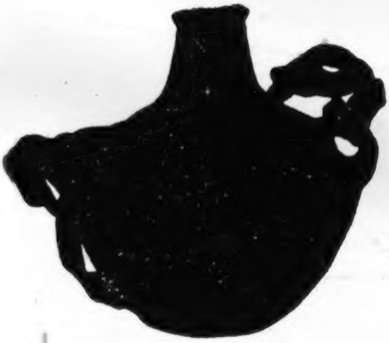


Fig. 38. Ashluslay vessel.
Prov.: Estero Patiño.
(1/3 nat. size.)

C 415 → A [415] ← The îru can be of any size: [illegible]re are very large ones like the Chané specimen of Plate XVII, 1 /see p. 127/ and other very small ones (Plate XVIII, 4 /see p. 131/) which little girls use to help their mothers and /Plate XVIII appears here/ /373/ become initiated into housework. Vessels 1 and 3 of Plate XVIII represent rather rare close forms, which derive from the primitive type but which have been perfected. The handles with which these îru are provided allow them to be carried on a trip in place of gourds.

C [172] Prototypes of the Chiriguano îru have been furnished us by Debenedetti's excavations (2, Fig. 119, p. 171) on the Isla de Tilcara.

Plate XVIII



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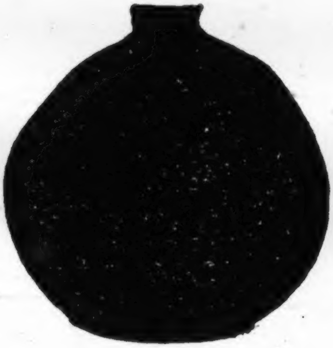

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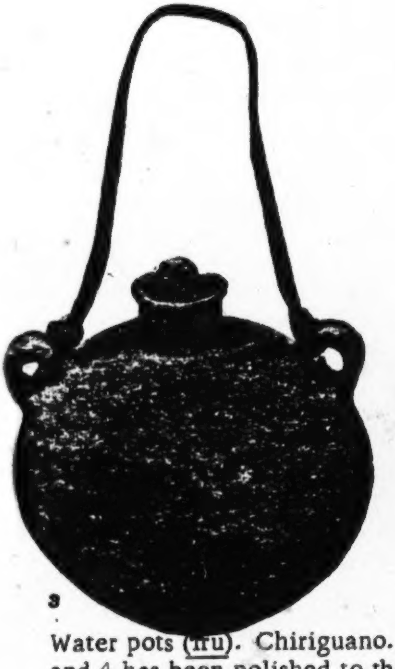

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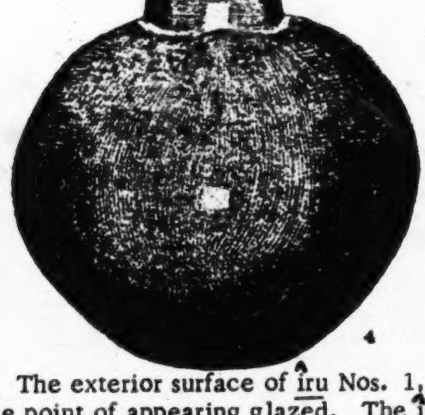

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Water pots (iru). Chiriguano. The exterior surface of îru Nos. 1, 3, and 4 has been polished to the point of appearing glazed. The îru No. 2 has been modeled in the shape of a calabash. No. 1 comes from Ivu, No. 2 from Caruruti, No. 3 from Yumbía, and No. 4 from Machareti. (1 and 2 = 1/4; Nos. 3 and 4 = 1/3 nat. size.)

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Typologically, we must put the vessels of the primitive tribes of the Chaco in the category of the îru. Like the Chiriguano or their forerunners the Chané, the Matako, Toba, Choroti, and Ashluslay copied Andean models, which they adapted to their needs. It is appropriate to note that the seminomadic tribes of the Chaco must have fashioned their vessels in such a way as to be able to take them along with t

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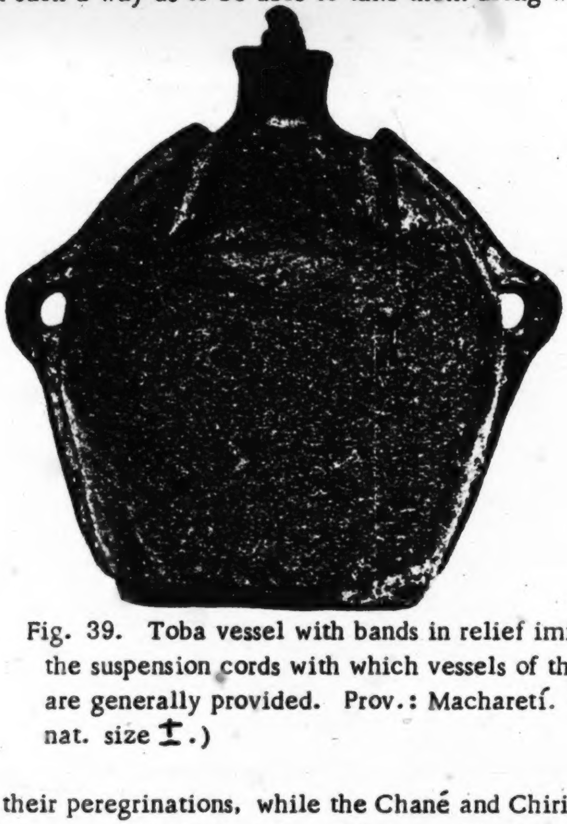

Fig. 39. Toba vessel with bands in relief imitating the suspension cords with which vessels of this type are generally provided. Prov.: Macharetí. (1/4 nat. size ±.)

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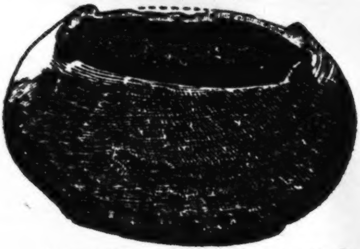
them on their peregrinations, while the Chané and Chiriguano, sedentary nations, did not feel the need to modify the primitive form and kept the Andean prototype without bringing variations to it. For comparison I am reproducing here two vessels from the Chaco: one (Fig. 37) comes from the Toba section of Macharetí, and the other (Fig. 38) from an Ashluslay tribe traveling in northern Argentina.

T 415 531 /373 cont./

The handsome vessel of Figure 39 comes from the Macharetí mission. It is /374/ the work of potters of the Toba tribe. Three details make it worthy of a place apart: the very wide, flat base; its almost quadrangular horizontal section, a very rare characteristic in Indian pottery; and, moreover, T 415 531 the two bands which run along the neck, imitating in terra cotta the suspension cords with which Toba vessels are usually provided.



C 415 ← Fig. 40. Small bowl (ñaè) with 4 nipples. Chiriguano. Prov.: Caipipendí. (2/5 nat. size.)

This vessel is a good example of the influence the way of T [482] life can have on the art and technique of a tribe. The ancient vessels of the Toba were, as I have just said, always furnished T [178] with a suspension cord to make it possible to carry them when traveling. Today the Toba are sedentary and this cord, having become useless, has been transformed into an embellishment.

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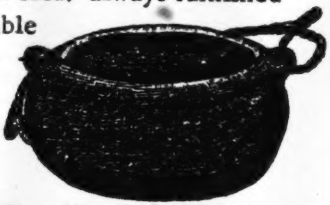


Fig. 41. Small miniature bowl with cord for hanging. Chiriguano. Prov.: Ñawirenda. (1/2 nat. size.)

Bowls

Bowls are not plentiful among the Chiriguano, among whom calabashes replace them to advantage. The ones I have been able to collect, and which were not painted, are made of a clay which, after firing, gives the appearance of being wood. The base is flat and the rather high sides flare out, except in the specimens of Plate XIX, 3, and Figure 40, where they are convex. The latter puco is

/374 cont./

415 surmounted by two nipples, remains of stylized ears. These protuberances can be perforated and allow a suspension cord to pass through, which permits hooking the bowl to a beam of the hut (Fig. 41).

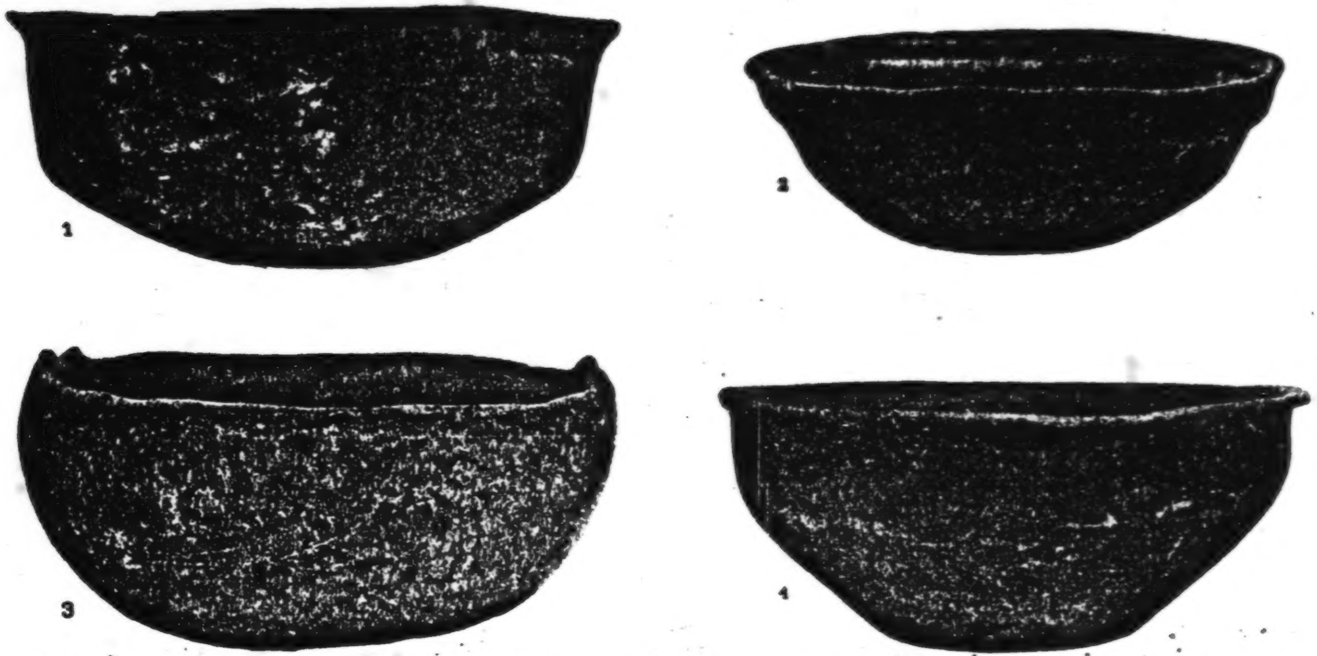
Spoons

412 Spoons are very common among the Chiriguano. Their
171 form connects them closely to those which have been made
172 known to us by the excavations carried out on the Bolivian
altiplano and in northwestern Argentina. It is among the ancient populations of this region that we must seek the origin of this cultural element (on this subject see Nordenskiöld, 9, pp. 91-92), of which the Chiriguano have faithfully kept the primitive aspect and even certain peculiarities such as the indentations of the handle which /Plates XIX-XXI appear here/ /375/ are seen on one of our specimens and on one discovered in the Puna de Jujuy (Pucara de Rinconada) by Boman (2, Vol. II, Plate LIX, Fig. 142).

Beside these spoons, whose use spread under the influence
412 of the civilized peoples of the west, the Chiriguano kept the
237 most rudimentary forms of this utensil: the valves of a fresh-
824 water mollusk (anodonta) (in Chiriguano: inta) are often used
by them to eat liquid dishes; the shell of the fruit of a bignoniacea (?) opened lengthwise also appears in the north of the Chiriguano territory as the survival of a time when spoons were still unknown to them (Fig. 44).

412 Some small calabashes, ovoid or round, with a jutting
peduncle, can, after being cut through the middle, replace
[171] wooden spoons to advantage (Fig. 45). It was in this natural
form that the spoon spread in tropical America where Andean influence did not make itself felt. The Chiriguano do not disdain using these half-calabashes to dip into the bean pot or the meat broth. Calabashes like the one of Figure 46 /see p. 139/ take the place of ladles.

Plate XIX



Bowls (naè). Chiriguano. Bowl No. 1 was found in a funerary urn from Caipipendí. It was originally painted red. Nos. 2 and 4 come from Saladito (upper Pilcomayo); No. 3 from Carurutí. (No. 1 = 1/3; Nos. 2, 4 = 1/3; No. 3 = 2/5 nat. size.)

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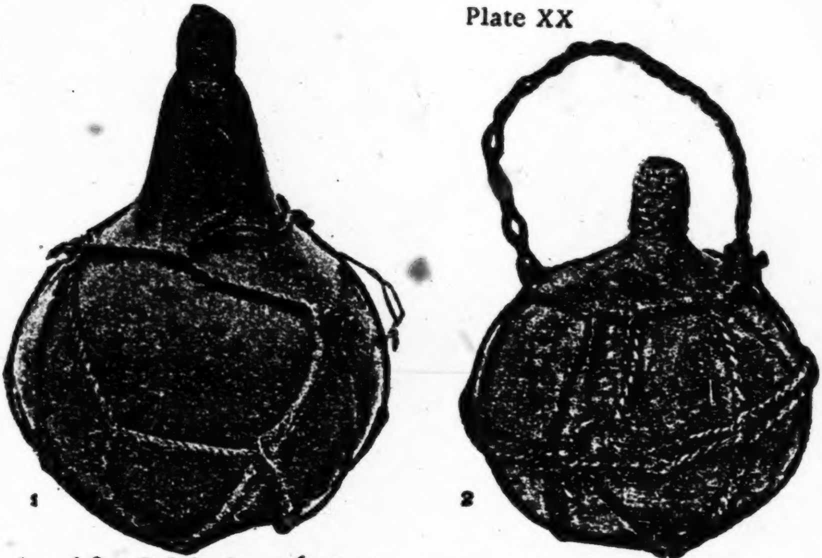
Plate XX



1 and 2. Calabashes (iá) put in a net in order to be transported or hung in the hut. Prov.: Saladito and Ivu. (1/3 nat. size.)

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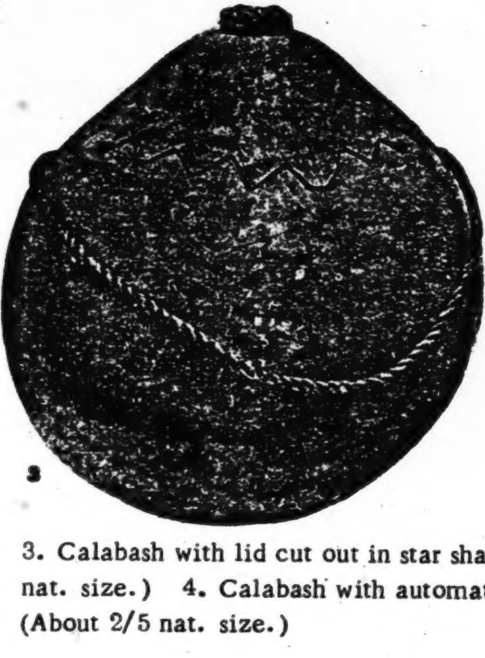
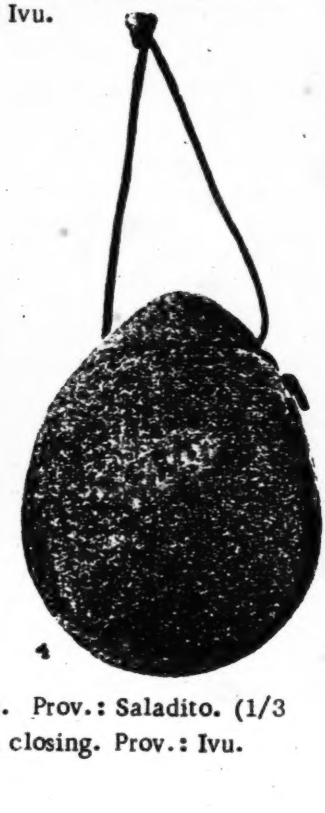
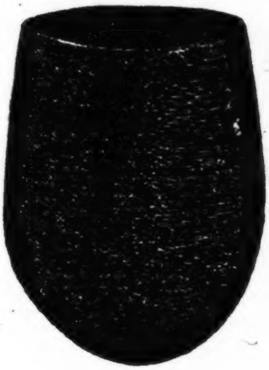


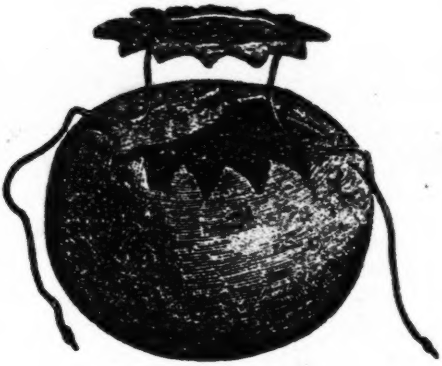


3. Calabash with lid cut out in star shape. Prov.: Saladito. (1/3 nat. size.) 4. Calabash with automatic closing. Prov.: Ivu. (About 2/5 nat. size.)

Plate XXI

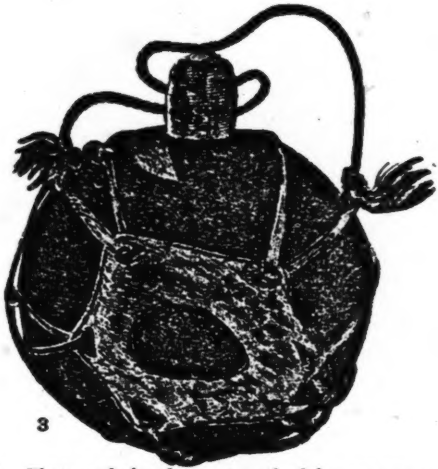


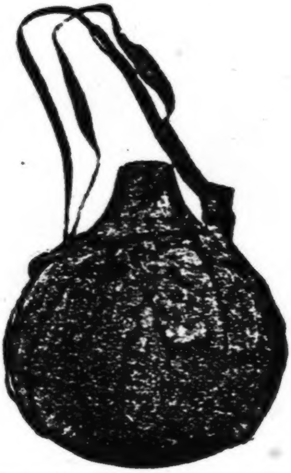
1



2

1. Calabash used as a mug. Prov.: Ňawirenda. (1/2 nat. size.)
2. Calabash with star-shaped lid and automatic closing. Prov.: Carurutí. (1/2 nat. size.)





3. Flat calabash suspended by means of lether thongs. Prov.: Tarairi. (2/5 nat. size.)
4. Calabash enclosed in strips of wembé bark. Prov.: Saladito. (1/3 nat. size.)

/375 cont./

Calabashes

415 In each Chiriguano village calabashes are as abundant as pottery (see Fig. 47 /see p. 139 /). The huts are full of them. They are of every shape and size, from the spoons we spoke of to the big basins in which the kãwi is distributed on feast days.

[286] The calabashes which are ovoid or gourd-shaped are generally enveloped in a kind of rudimentary net of vegetable fibers or leather thongs, which allows them to be carried in the hand or hung (1). In them is put either water, or grain and seed, or roasted flour, or finally roucou or kalasapa powder saved for feast days (Plate XX, 1 and 2; Plate XXI, 3 and 4).

415

[322] Some calabashes are provided with a lid which the Indians make by cutting a calotte with star-shaped edges in the still green fruit, and this then forms a hermetic closing. The lid is fastened on by means of a small cord which, when pulled, suffices to close the calabash /376/ (Plate XX, 4 and Plate XXI, 2). Gourds whose opening is small in diameter receive a fragment of a shelled ear of corn as a stopper. /Figs. 42-47 appear here./

[121] Painted, pyrographed, or incised calabashes will be the object of a special study.

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1. Nordenskiöld (10, p. 97) has given the list of the South American tribes who put their calabashes inside a net to carry or hang them. This contrivance is widespread on the continent and its distribution is certainly greater than that indicated by Nordenskiöld, but travelers generally take only slight interest in such details, which are nevertheless important. The Kaingúa of Paraguay encompass their calabashes with wembé bark just like the Chiriguano (see Ambrosetti, 2, p. 716).

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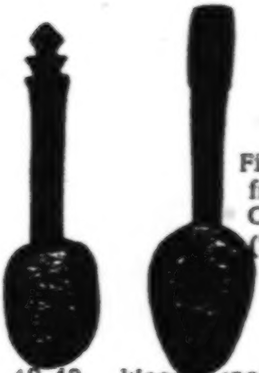

Figs. 42-43. Wooden spoons (karuha or iwira-karu). No. 42 comes from Carurutí and 43 from Ñawirenda. (1/4 nat. size.)

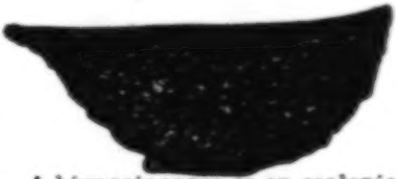

Fig. 44. A bignoniaceous or an asclepiadaceous fruit whose shell cut in half is utilized by the Chiriguano as a cup or spoon. Prov.: Caipipendí. (2/5 nat. size.)

Fig. 45. Calabash cut in half to serve as a spoon. Prov.: Macharetí. (1/4 nat. size.)

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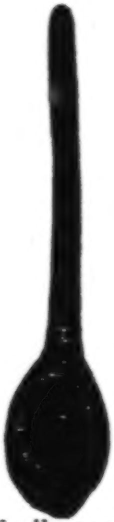

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Fig. 46. Ladle carved out of a calabash. Prov.: Tintapaw (upper Pilcomayo). (1/7 nat. size.)

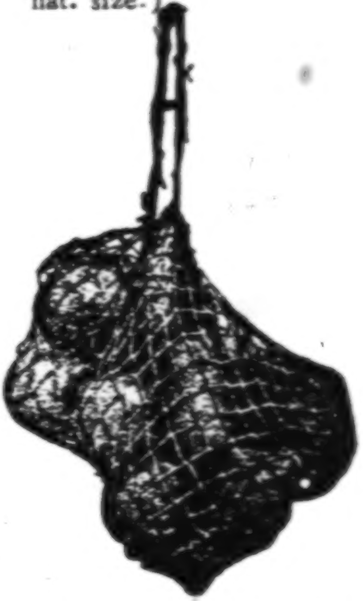

Fig. 47. Reserve calabashes hanging in a net inside a Chiriguano hut. Ibopeytí.

Choroti SK6
Araucanians SG4
Tupi-Guarani SL6

/377/

Wooden Bowls and Basins

C 415 171 439 The Chiriguano also use wooden bowls (Fig. 49). I do not know whether they make them themselves or receive them from the half-breeds of the /Fig. 48 appears here/ San Luis region. In this latter case the Chiriguano of the San Luis (Entre-Rios) region would be the only ones to make them. In Tarija /Figs. 49-50 appear here./ where these bowls are much sought after by the half-breeds, they were indicated to me as coming from that zone. The rare wooden bowls which /378/ I saw at Caipipendí had been bought by the Chiriguano in the course of their trips. The same origin must be attributed to the wooden troughs found among the Chiriguano who live near the Quichua half-breeds of Tarija department. These basins are used for washing food and also as bathtubs. Ci 415 177 The Choroti have wooden dishes (Nordenskiöld, 9, Fig. 20, p. 88) which have a shape very similar to that of the trough reproduced here (Fig. 50) and which doubtless were introduced among them either by the ancient Quichua or by the half-breeds. A 415 171 Among the Araucan of Argentina wooden basins are found, which are similar in every detail to those of the Indians and half-breeds of Bolivia and the specimen pictured here.

Chapter V

Tools of the Chiriguano

C 412 178 [177] The work tools the Chiriguano use nowadays are almost all of European manufacture. Here and there the ancient forms were kept when stone or bone were replaced by iron. Witness the adze of Plate XXII /see p.143 / which constitutes a curious survival of the eared or T-shaped ax certainly adopted by the Chiriguano after their migration and their establishment at the foot of the Andes. T-G [412] [184] This type of ax is unknown to me from any other Tupi-Guarani tribe and is rare in the area occupied by the different nations belonging to this linguistic family (see Rivet, 1, pp. 149-155).

Modern Quechua SE24

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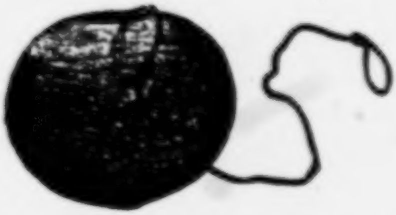

Fig. 48. Calabash hung by means of a transverse stick. Prov.: Ivu. (1/3 nat. size.)

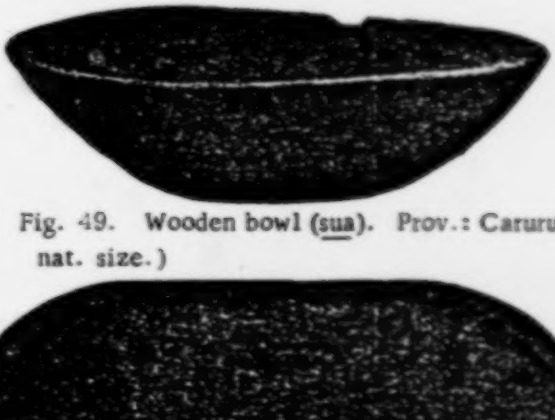

Fig. 49. Wooden bowl (*sua*). Prov.: Carurutí. (1/3 nat. size.)

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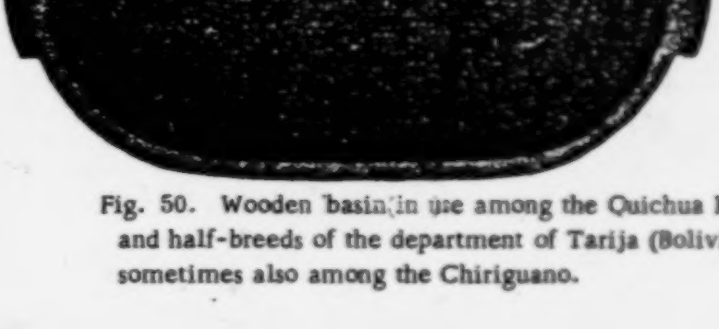


Fig. 50. Wooden basin in use among the Quichua Indians and half-breeds of the department of Tarija (Bolivia) and sometimes also among the Chiriguano.

/378 cont./

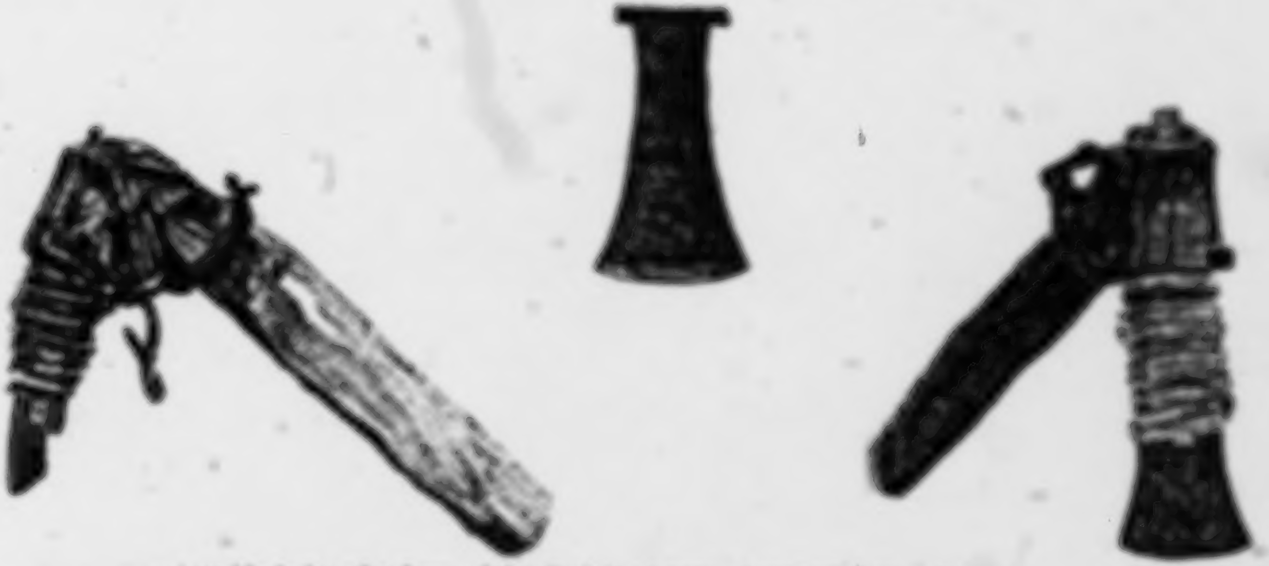
412 The specimen I am publishing here was still giving good
114 service to its owner, who gave it to me with regret and only
171 for a large sum of money. The presence of the eared ax among
178 the modern Chiriguano invalidates the allegation of Nordenskiöld
(14, p. 120), who places it among the cultural elements which
have completely disappeared in South America. It survived
[181] thanks to the prodigious conservatism of the Indians. I am
convinced that several of the objects whose disappearance is
attested to by Nordenskiöld will perhaps be found in some
tribe now living, when we have more abundant ethnographic
material from South America than we now have at our disposal.

412
171 Another very interesting peculiarity of this ax is the bent shape of the handle, to which the blade is securely fastened with leather thongs. The distribution of the bent-handled ax has been traced by Linné (2, p. 202). Few tribes of South America have continued to use it up to our day. They are: the Colorado of Ecuador, the Tukanó /Tucano/, Tarianá, and other tribes of the /Plates XXII and XXIII appear here/ /379/ Caiary-Uaupés, the Tehuelche, and the modern Quichua /Quechua/. Among the Indians of the Caiary-Uaupés the tool lost all practical value and finally became a simple dance accessory (Koch-Grünberg, 2, Vol. I, Fig. 225, p. 336). /Fig. 51 appears here./

The bent ax has been found archeologically in Peru (Chuquitanta: Marquez Valley near Lima) and in Casabindo in La Puna de Jujuy (Argentine Republic). The specimens from Peru are designated as being hoes, which is possible. However, I shall call attention to the fact that the Chiriguano specimen from Caipipendí is exclusively a carpenter's instrument, which the Indians use for cutting the pieces of wood from which they make their furniture or weapons. /Fig. 52 appears here./

Figure 51 shows how modern axes of the simple neolithic ax type can be hafted exactly like their stone prototypes. The similarity of this ax to the stone ones used up to today by the Guayaki extends to the somewhat arched shape of the handle and to its slightly swollen upper end (La Hitte, Plate IV, 9).

Plate XXIII



[illegible] iron blade has the form of the T-shaped axes of ancient Peru. From [illegible]
Caipipendi. (1/3 nat. size.)

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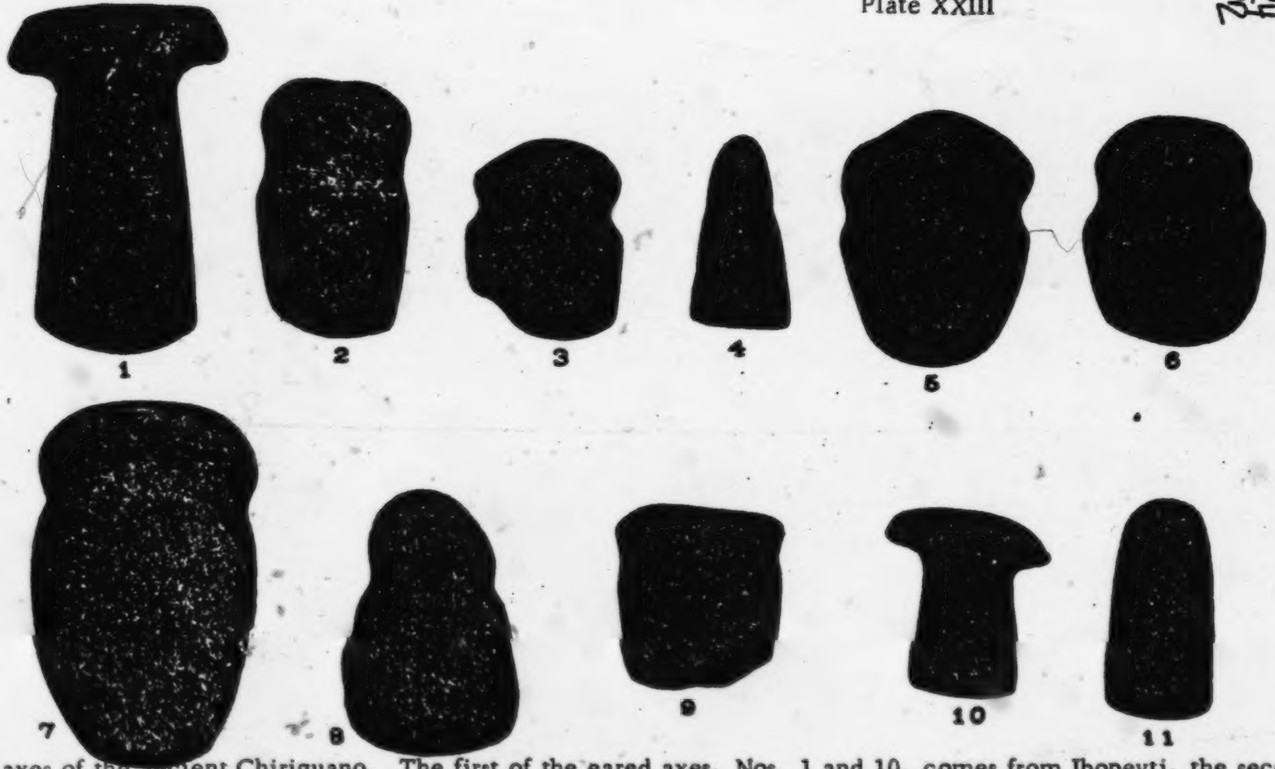
Plate XXIII



Stone axes of the ancient Chiriguano. The first of the eared axes, Nos. 1 and 10, comes from Ibopeyti, the second from Ivu. The axes with a complete groove (Nos. 2, 3, 5-9) were collected in the Caipipendí Valley, with the exception of ax No. 4, which was acquired in Ivu. The simple neolithic ax, No. 11, comes from Caipipendi. (1/3 nat. size ± .)

/379 cont./

412 171 Still hafted in this way are the stone axes of the Indians of the upper Xingu (Steinen, 2, p. 197) and the Kaingang /Caingang/ of southern Brazil (Nordenskiöld, 15, Fig. 16, p. 38) and the iron cutting tools of the Matako-Vejos (Nordenskiöld, 15, Fig. 29, p. 44) and the Yamana (?) of Tierra del Fuego (id., 14, Fig. 45, p. 86) which replaced the ancient stone celts.

172 412 Plate XXIII /see p. 144/ reproduces a series of stone axes coming from the region of Caipipendí, Ivu, and Ibopeytí. The Caipipendí axes are all provided with a groove. Of the two axes with heels one was found at Ibopeytí and the other at Ivu.

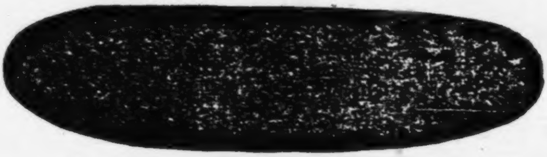


Fig. 52. Stone roller used as a grinder on a flat stone. Archeological piece found at Ivu. (1/4 nat. size.)

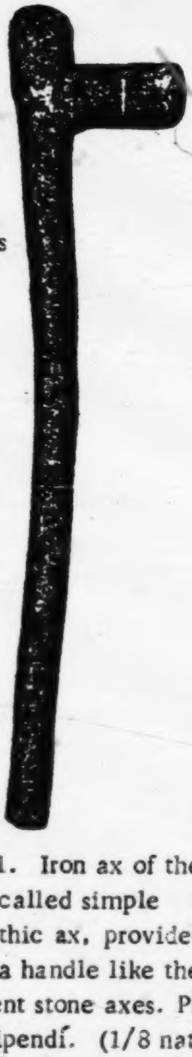


Fig. 51. Iron ax of the type called simple neolithic ax, provided with a handle like the ancient stone axes. Prov.: Caipipendí. (1/8 nat. size ±.)

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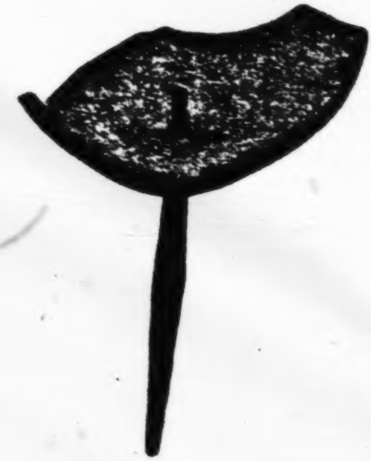

Fig. 53. Mold for making tin labrets (tembetayapua). Prov.: Yumbía. (1/3 nat. size.)

Mold for Tembetas

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325 The tembeta, or labrets, of the Chiriguano are of tin. They make them themselves with the aid of the mold pictured here (Fig. 53). It is a calabash into which the fins of the labret have been hollowed out, while the thicker central part of the ornament corresponds to the end of a stick going through the calabash. The cavity produced in the central part of the labret is then filled with wax into which glass or turquoise beads are incrusted. These come from ancient burial-places and are sold to the Chiriguano by the half-breeds of Tarija. [531] [439]

Balances

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171 The Chiriguano of the upper Pilcomayo and the Igüembé valley prize coca quite as much as the Quichua of the altiplano. Besides, it is from them that they got this vice. The fact is known and does not need to be demonstrated. This custom

/380 cont./

276 177 171 spread among the Chiriguano recently for it has not yet spread throughout the territory they inhabit. The Chiriguano who live far removed from the half-breed or Indian populations of the Cordillera are not "coqueros," and only rarely does one meet among them some old man who accepts a quid of coca.

276 171 302 114 Ivu is the last point toward the east and north where I could distribute my supply of coca to advantage. Nordenskiöld (10, pp. 85-91) sought to demonstrate that the custom of blackening the teeth went along cheek by jowl with that of chewing coca and derived from it. As a matter of fact, this habit has a very marked western distribution and follows the zone of coca cultivation.

276 [824] The Chiriguano mix each quid of coca with the ashes reaped from a tree (ulala) whose scientific name I do not know. These ashes (tanimbo), which corresponds to the llicta of the Quichua, are contained in a small leather bag.

276 439 804 Coca is a luxury commodity which the Quichua Indians or half-breeds come to sell to the Chiriguano. To avoid all argument and all fraud on the part of unscrupulous sellers, the Chiriguano have recourse to balances of their own making. They fabricate them with /381/ two calabashes cut in half to serve as scales (Figs. 54 and 55). The balance with scales was in [177] use in pre-Hispanic times /Fig. 54 appears here/ in the ancient Inca Empire (see Nordenskiöld, 16) and so I believed at first that among the Chiriguano it represented a survival of /Fig. 55 appears here/ the Andean influence, whose importance we shall see further on. Among the Chiriguano, however, this object is designated by the Spanish name /382/ mbalanza, which seems to indicate that they borrowed it from the half-breeds. The latter and the Quichua use them in their commercial transactions, but especially for weighing the precious coca. Perhaps it was the same in prehistoric times. There is nothing to prove that only metals were weighed, as has been supposed with respect to these ancient scales.

804 177 For weights the Chiriguano use old Bolivian silver coins and express measures according to the old Spanish system. By a tacit convention a coin worth two modern sous is the equivalent of one ounce.

Modern Quechua SE24

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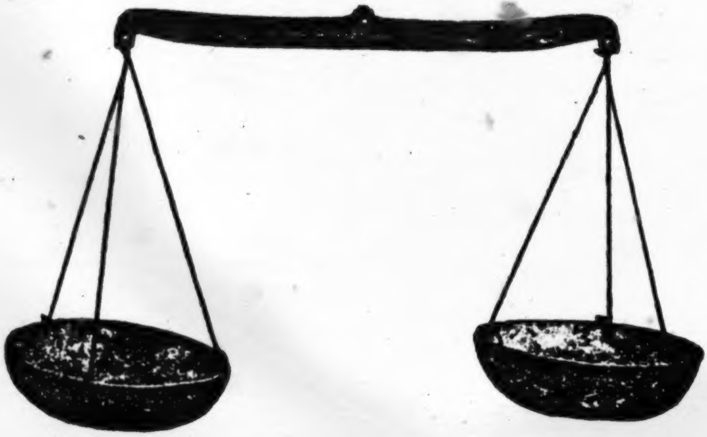

Fig. 54. Balance with scales in use among the Quichua half-breeds of the Tarija region. Prov.: Narvaez River. (1/5 nat. size.)

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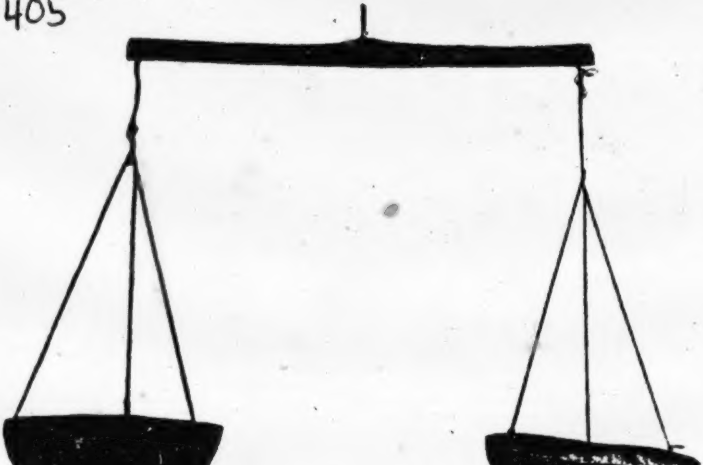

Fig. 55. Balance (mbalanza) in use among the Chiriguano for weighing coca. Prov.: Saladito (upper Pilcomayo).

/382 cont./

804 439 [177] The Chiriguano measure the cloth which Syrian peddlers come to offer them with varas, that is, a stick about 80 centimeters long, the length of the ancient Spanish vara. This instrument has been borrowed from the Bolivian half-breeds.

Chapter VI

121 Art among the Chiriguano and Chané Indians

To Professor Félix F. Outes.

The artistic sense of the Chiriguano is manifested in pottery decoration, pyrography, and wood carving.

We shall study these three activities one after the other.

Pottery Technique

114 323 The Chiriguano pottery technique has been studied briefly by Campana (p. 54), following Father Giannechini's notes, and by Outes (3, pp. 122-123), who adds some details communicated to him by the naturalist Holmberg to the ones he took from Campana's work. Nordenskiöld (1 and 10, pp. 142-147) completed on many points Campana's brief survey, so that I myself shall have few new things to note.

317 323 The clay used by Chiriguano potters comes from beds well known to the Indians, where they go from time to time to lay in fresh supplies. It is enough to see old vessels full of earth around a hut to know that a woman lives there still [439] practicing the ancestral industry. Where adequate clay is lacking, pottery is imported. Thus in the Tigüipa mission all the vessels in use were made in Macharetí.

323 In order to be used the clay must be degreased with powder /383/ coming from potsherds. Fragments of old vessels are ground in a mortar until, after being put through a sieve, they give a fine powder which is kneaded for a rather

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323 long time with the clay. This paste must have all the impurities removed, which is done in the course of the kneading (Fig. 56).

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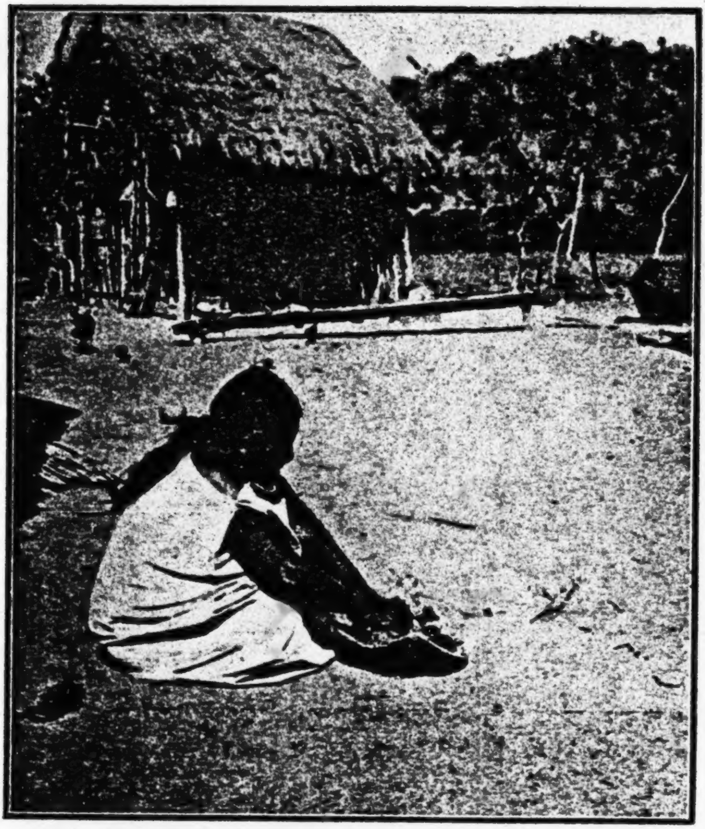

Fig. 56. Fabrication of a vessel: the clay, after being mixed with pulverized potsherds, is kneaded. (Photographs taken by the author at Masaví in the Igüembé Valley.)

323 When the potter has obtained an elastic and sticky paste, she molds the base of a vessel, which she puts either on a piece of cloth or a small board. The foundation of the future receptacle looks like a disk raised on its periphery. A

/383 cont./

323 Chiriguano woman will never be seen making one single vessel at a time: since before continuing she must wait until each one of the parts making up the piece of pottery is dry, she occupies this interval by beginning another vessel, which will dry while she works on the first one again.

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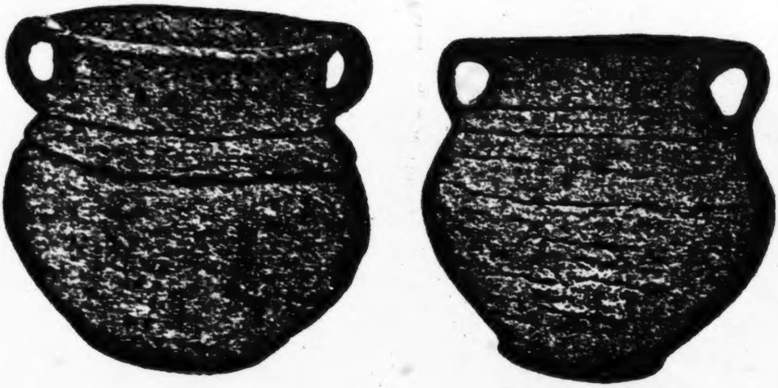

Figs. 57-58. Vessels (yapepó). The rolls of clay of which they are composed are still apparent and constitute a rudimentary ornamentation. No. 57 comes from Caruruti, No. 58 from Yacuiba. (1/4 nat. size.)

323 /384/ When she judges that the bottom has taken on some firmness, she rolls between her hands a roll to which she tries to give a regular diameter. Then she applies it on the base, forming a perfect circle. She cuts off the part which extends beyond the junction point. Next she flattens the roll with her hand, the compression being made from inside to outside, with the back of the left hand and the right palm. When the whole periphery has thus been raised, she evens off the edge, filling all the depressions with pieces [824] of wet earth. Then she smooths the outside of the vessel with a [412] stripped ear of corn and a splinter of bamboo. These two instruments are placed beside her and frequently dipped in water so that the earth [237] does not stick to them. The inside surfaces are polished with the valve of a shell (anodonta) (Plate XXIV, 2). The raw clay, once it is shaped, is supple and resistant like leather. Vessels can be

C 323 /384 cont./
made only in the sunshine. One day when rain threatened to fall, the women hurried to grab the vessel they were in the act of making and to carry it into the hut. It was swinging on all sides during this moving, but did not break at all.

From base to neck the vessel is constructed in the same fashion, the number of rolls superposed varying with the size of the vessel but never being very large. The handles are added last. Some are twisted and have been obtained in the following manner: a long, thin roll is bent in two and rolled on itself.

When finished, the vessel is put to dry. After it has hardened, the potter rubs it on the inside with a shining, polished stone (tankua or ita-nkua) (Plate XXIV, 3-4) until the surface is rendered shiny as /Plate XXIV appears here/ /385/ if glazed. The purpose of this operation is to avoid porosity of the inner wall of the vessel, which without that would be too permeable. The exterior of ordinary vessels is left as is. Vessels that are to be painted are apparently also polished on the outside. The polishing of the vessel is done over several days and slowly. The potter does it with great care (see Fig. 66).

C [237] [413] If the vessel is to be painted, the color is applied with a brush made of agouti hair or feathers held together in a tuft with wax (Plate XXIV, 1).

C Ce 386 The coloring materials used by the Chiriguano and Chané are of mineral and vegetable origin. The first are taken from rocks, of which I have had samples examined petrographically and chemically.

Chemical analysis gave the following results: the yellow samples contain clay (aluminum silicate and calcium carbonate) and iron in the form of hydrated oxide; the reds are of the same composition but contain less hydrated iron oxide and more iron oxide. In a specimen of yellow-brown ocher the iron oxide is abundant. In another, hard and compact, of a red-violet tint, the iron is almost entirely in the state of anhydrous oxide.

The yellow, red, and dark-yellow ochers, when heated in a test tube, change color and become dark red, with the exception of the violet specimen which remains invariable.

[Text continues on p. 154]

Plate XXIV

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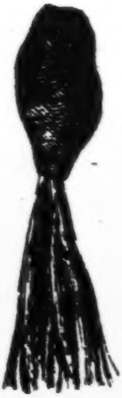
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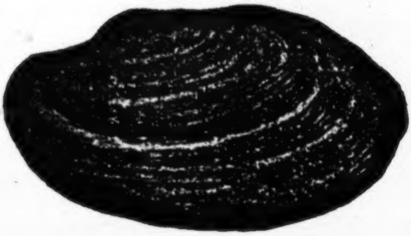
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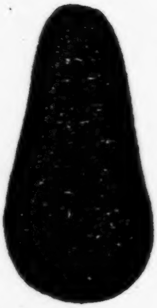
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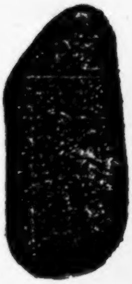
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Accessories of a Chiriguano potter. -- 1. Brush made of feathers held together with wax. Prov.: Ibopeytí. (Nat. size.) -- 2. Valve of a fresh-water mollusk (*inta*), used to smooth the inside surface of the vessels. Prov.: Ibopeytí. (1/2 nat. size.) -- 3 and 4. Stones used for polishing the exterior and interior surfaces of vessels before firing (*intankua*). These two stones were found inside a funerary urn in Cararutí. (2/3 nat. size.) -- 5. Excrescence formed by an insect on the branches of trees of resinous species, which the Chiriguano utilize for tracing out black and shiny figures on their vessels (*tarawirisi*). Prov.: Ibopytí. (± nat. size.)

/385 cont./

C Ce 386 Two gray minerals are silicates of aluminum and calcium with traces of iron. They are almost pure clays.

A jet-black mineral is a calcareous manganese-bearing complex (manganese dioxide in the form of oxide crossed by veins of calcite).

Petrographically, these samples are some yellow ochers very compact (manganese-bearing, quartzose) or somewhat sandy, some very sandy red ochers, and finally slightly sandy clays.

The ochers all give a red color, pyrolusite (?) furnishes black, and the pure clays the yellowish white on which red and black motifs stand out (1).

> 1. Nordenskiöld (10, p. 145): "The colours used by the Chiriguano and the Chané on the Rio Itiyuro are black, red, brown and white. The white is caolin, the red, brown and black are obtained by pulverizing schists of these colours." /cited in English./

C 323 Colors of mineral origin are applied on the walls of the dried and polished vessel before firing.

C 323 237 Most of the vessels from the upper Pilcomayo are distinctive because of motifs of a glossy, solid black which the Indians obtain by rubbing, shortly after firing, with a resinous excrescence looking like a white muff, which a kind of cochineal (?) forms around /386/ mimosa branches (in Chiriguano: iskayanti) and in which she deposits eggs (Plate XXIV, 5).

According to Father Giannechini (Diccionario Chiriguano-Español, etc., p. 200), who was the first to note the use of this material, it was a question of the viscous saliva of an ant (?) which sticks to the trees. The /Fig. 59 appears here/ Chiriguano potters would use it to paint their vessels after mixing it with roucou. In reality, this information is inexact. The resinous muff is not made of saliva but a kind of manna or lac. It is rubbed directly against the sides of the vessel to produce the solid, glossy black of certain motifs.

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323 The paintings on some vessels produce a particularly successful /387/ effect, thanks to the alternation of brilliant,

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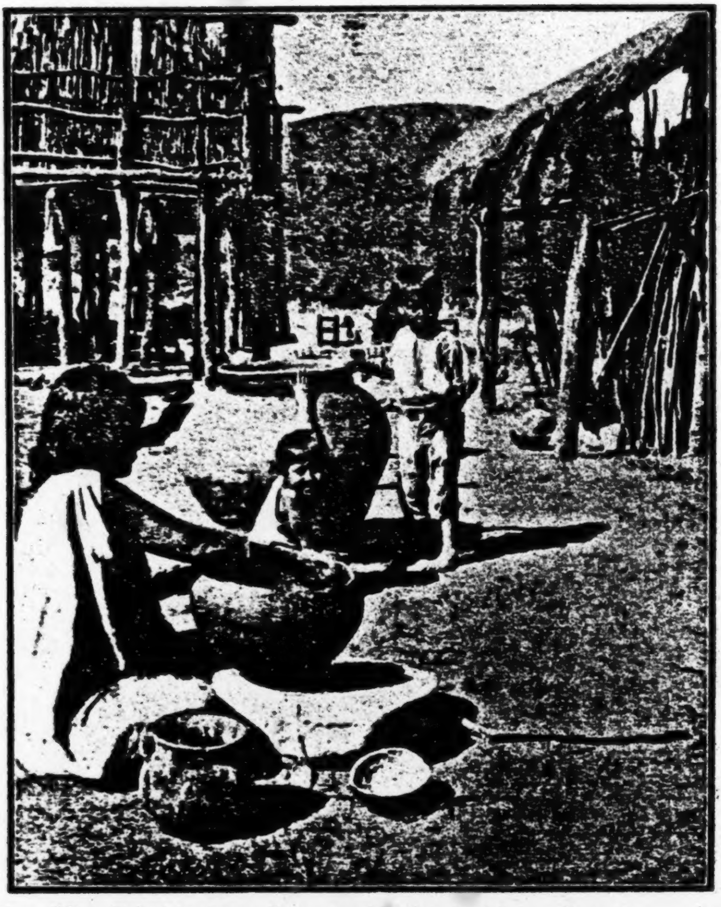

Fig. 59. Fabrication of a vessel: the inside surface is polished after being flattened with the hand.

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[386] solid red with black of the same nature. The first of these colors is taken from the famous roucou, whose oily paste is mixed with resin, kneaded into a loaf, and melted on the hot walls of the vessel.

Chane SF8

/387 cont./

C 323 386 The name tarawirisi is also given by the Chiriguano to objects resembling loaves of bread kneaded by hand which are composed of a resinous material mixed with wax. According to the explanations given me by the Indians themselves, this

C 417 415

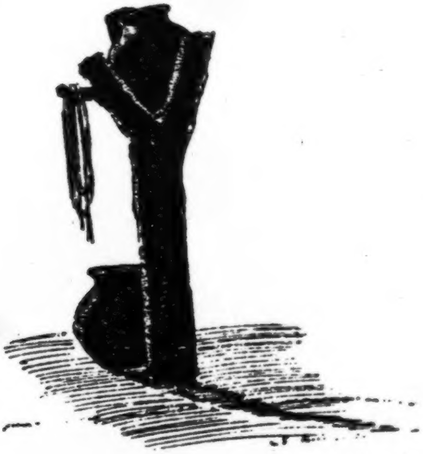

Fig. 60. Forked tree-trunk serving as a shelf for putting vessels on. (After a sketch by the author.)

C 323 386 substance is taken from a mimosa. After being sprinkled with boiling water, it is kneaded and dried in the sun. Its color is yellow or red, but after firing it becomes black.

I could not learn whether this black glaze was applied over a layer of black paint or spread directly on the walls of the vessel. In every case the designs made by this process are much less regular than the ones drawn with a brush. C

[126] C Cc 114 323 386 My collections of pottery, which consist of nearly 200 pieces, do not contain any glazed specimen. Nordenskiöld (10, p. 144) assures us that the Chiriguano and the Chané of the Parapití coat their yambui with a sort of gum called tarawisi, a word which, except for one syllable, is the same as the one designating the resinous substance we have just been considering.

Chane SF8
Chaco Indians SK4

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Ce
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/387 cont./
This makes me think that glazing implies a technical process analogous to the one in use on the upper Pilcomayo.

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C.I
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The Chaco Indians draw crude decorations on their vessels with *palo santo* resin, which they apply after firing. According to Nordenskiöld (*id. supra*), the Chané of the Itiyuro probably use the same method to decorate some of their vessels with black designs.

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After being painted, the vessel is put in the shade to dry for several days. It is only when the sides have acquired a certain hardness that the firing process is begun. The vessels are then taken to a spot where there is plenty of dead wood. A large quantity is collected, with which the vessels are covered from bottom to top. Generally, long pieces of bark are selected, which burn brightly.

They set fire to this pyramid of wood and, with a long pole, the /388/ potter watches to see that no brand burns directly against the walls, which would bring on a "shot of fire." When she ascertains that a vessel gives a metallic sound on being touched, she scatters the firebrands with her pole and, by rolling it, makes it go out of the fire.

It may happen that in the course of the firing a vessel may suffer some cracking. This is remedied by taking a little moist earth mixed with dung and applying it on the split while the vase is still hot. The fissure closes, but remains noticeable.

Classification of Chiriguano Pottery

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The figures which illustrate this text, the plates published by Nordenskiöld (10, pp. 155-162), and the diagram of Outes (3) give a better idea of the more common forms of this pottery than any description. However, a few remarks are called for.

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Vessels with a subglobular belly surmounted by a low, wide neck flaring at the top constitute, without doubt, the most widespread type. (Plates XXXV-LVII.)

/388 cont./

415 184 The footed bowl or "compote" (Fig. 72) comes from the Caipipendí valley, the same as the vessel with ribbed belly of Plate XXVI, 2. These are the only specimens of this type that I found in the whole Chiriguano country.

415 184 532 Anthropomorphic or zoomorphic vessels are rare. Scarcely anywhere but in the Caipipendí valley is corn beer ordinarily served you in vessels shaped like a bull. Besides, their workmanship is careless. The admirable anthropomorphic vessel of Plate XXVI, 1 is an exceptional piece.

415 Twinned vessels (Plate XXVII, 3) and those which a constriction separates into two bodies (Figs. 74, 75, and Plate XXVII, 1) are very rare.

415 531 The motifs painted on Chiriguano vessels most often are of a purely geometric nature.

There are few exceptions to this rule. As an example of them, I shall give the large yambuí of Plate LII, 1, on the belly of which have been painted more or less stylized dogs, chickens, and toads; the yambuí of Figure 83, whose principal decoration is composed of a series of yakú (pavo del monte /wild turkey/, Penelope spec.); and finally several vessels in my collections, which I did not want to publish because of their completely Europeanized form. On one of them silhouettes of nandus are distinguishable (Plate XXXIV, Fig. 222) and on another have been drawn a man and woman whose hands are united by a red line (symbol of marriage, of love?).

I remember having seen on a jar in the Caipipendí valley /389/ nandus drawn with particular skill. I would gladly have bought that piece if it had been possible to arrange its transportation.

[178] The vessel of Figure 83[1] gives an excellent idea of what Chiriguano potters could do in the "realistic" genre if a long /Fig. 61 appears here/ tradition did not oblige them to limit themselves to the representation of geometric motifs.

[1] [See P. 249, Category 116--Analyst]

/389 cont./

415 531 The plant kingdom hardly inspires Chiriguano artists. The vessel of Plate LII, Fig. 3, is the only one whose decoration is clearly phytomorphic; and again in this case I am not sure that

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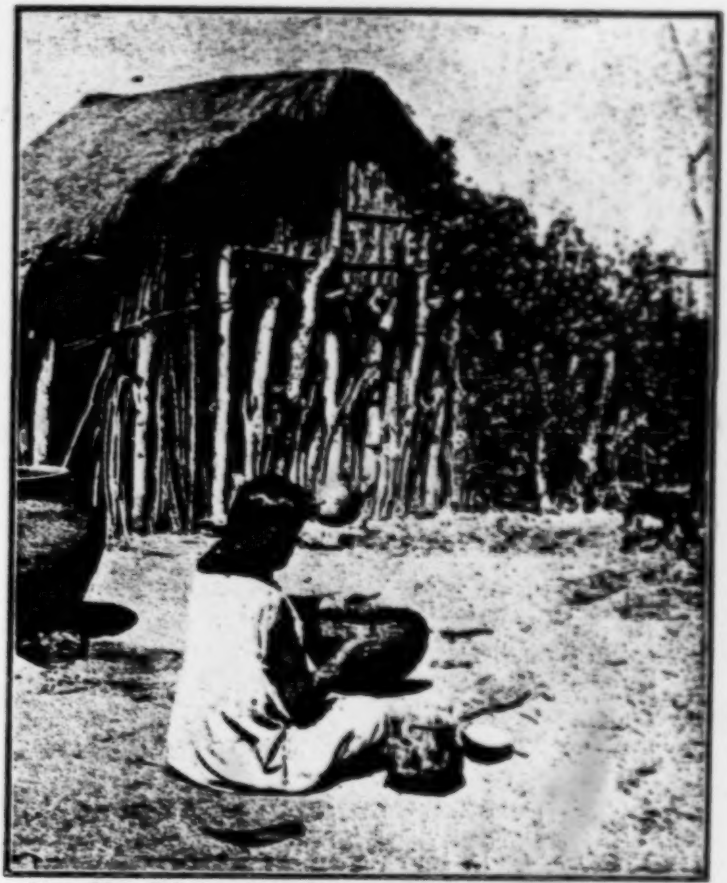

Fig. 61. Fabrication of a vessel: the exterior surface is smoothed with a chip of bamboo after being flattened with the hand.

415 531 a European model did not serve as an intermediary between nature and the picture the potter portrayed.

[126] [179] /390/ Among the 200 vessels I collected in Chiriguano country there is not one that includes a figuration of the human face, with the exception of the one to which I have alluded, whose form betrays the desire to satisfy the stupid puerility of THE TOURISTS.

/390 cont./

000 the tourists. In this respect Nordenskiöld (10, Fig. 78, p. 137)
Ce was more fortunate than I: among the Chané of the Parapití
415 he was able to acquire a pot on which one distinguishes a nose
531 in relief and the organs of the face painted in a conventional
199 fashion, but in which the Andean influence is clearly re-
532 flected.

C Each region, often even each village, has its special
531 style, and this varies again according to the fancy or skill
415 of each potter. The differences are often sufficiently accentuated
184 to permit an ethnographer with some experience to recognize
the provenance of each piece at first glance.

From the point of view of decorative style, the Chiriguano country is divided into three zones, whose characteristics are the following:

On the upper Pilcomayo the fundamental element of decoration is the spiral in the form of a couchant S which is combined with the volute of another color taking off from the apex of a triangle (see, for example: Plate XXXV; XXXVI, 1; XXXVII, 2; Plates XLVII-L, etc. /see pp. 211 ff. and pp. 226 ff./

This motif is arranged in parallel zones framed by geometric figures (festooned lines, alternate triangles, barbed strokes, etc. (see, for example: Plate XXXVIII, 1 /see p. 213/; Plate XXXIX, 2, /see p. 215 /; Plate XL, 2 /see p. 216 /; Plate XLIV, 2 /see p. 220 /. Rare are the pieces of this zone whose principal decoration does not consist of variously combined spirals. The style of the pottery I collected in the Igüembé valley differs only a little from that of the upper Pilcomayo: we find the same principal elements without, however, the spiral playing a predominant role (Plate XXXIX, 1; Plate XLI; Plate XLII, 2; XLVIII, 4; Plate LI, 1-3; LIV, 2).

C The pottery made by the Chiriguano of the Ivu,
531 Macharetí, and Tarairí missions and by the Chané of the
415 Itiyuro reveals a special predilection for linear motifs stand-
184 ing out in black against a yellowish background. These are
Ce ascending and descending lines which run around the belly of
531 the vessel forming large triangles, and something of a kind,
415 which, in turn, end in Greek frets or spirals. The triangle

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surmounted by a volute is a motif which appears often in this region. Triangles with a solid surface combine to form either denticulate bands or somewhat hourglass-shaped figures whose effect is pleasing to the eye (Plate XXXIX. 1; Plate XL. 7; Plate XLI; Plate XLII. 1; Plate XLIII. 1; Plate LII; Plate LIV. 1 and 3-4; LVII. 3-4; LV. 1 and 3. etc.).

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Between the Chané vessels (Plate XXXVIII. 1; Plate LIII. 1-3) and the Chiriguano ones in the environs there are some differences which have less to do with the choice of motifs than with the manner in which they are treated. The Chané women have a purer taste and they evince greater sureness /201/ of hand than the Chiriguano potters. One senses clearly that the latter are only their pupils.

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It is difficult for me to say what decorative style might have been in vogue in former times in the Caipipendí valley (Plate LVII. 7; Plate LX. 4; and Fig. 72). Painted vessels have become rare there, and the few examples I saw or acquired were in very bad condition. As elsewhere, they were covered with geometric figures: broken lines, triangles, /Fig. 62 appears here/ festooned bands, etc. The individuality of Caipipendí pottery shows itself more in the form of some vessels than in their decoration.

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Since I could not visit the Chané of the lower Parapití, I have no idea of the characteristics of their pottery. Nordenskiöld (11, p. 164), who was more favored than I, declares that their pottery presents only a few traces of Andean influence, and he explains this fact by their isolation and poverty.

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If now, instead of style, that is, the combination of motifs, we consider the latter in themselves, /202/ a feeling of unity will succeed our feeling of diversity. The same identical designs are repeated over the whole of Chiriguano territory, and only their relative frequency in a given area and the importance attributed to them to the exclusion of the others create these distinctions of style which I have tried /Fig. 63 appears here/ to define. Nevertheless, there are some decorative elements which are limited to a certain region: the spiral is

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583 184 peculiar to the villages of the upper Pilcomayo and the Igüembé valley. The decoration made up of broken and asymmetric lines does not go beyond the zone of the Franciscan missions and the Itiyuro region.

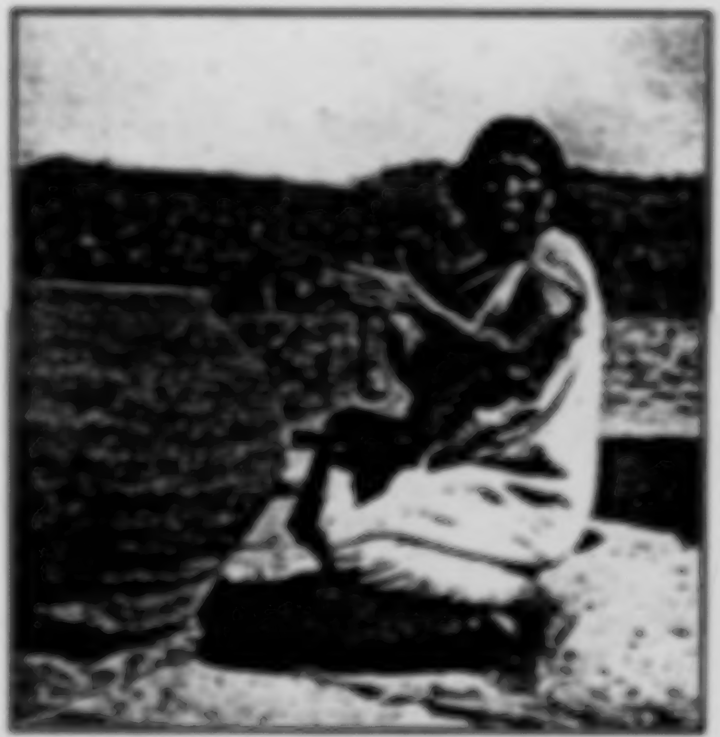

Fig. 42. Fabrication of a large vase: the coil of clay is rolled between the palms of the hands. (Photographs taken by the author at [illegible], Igüembé Valley.)

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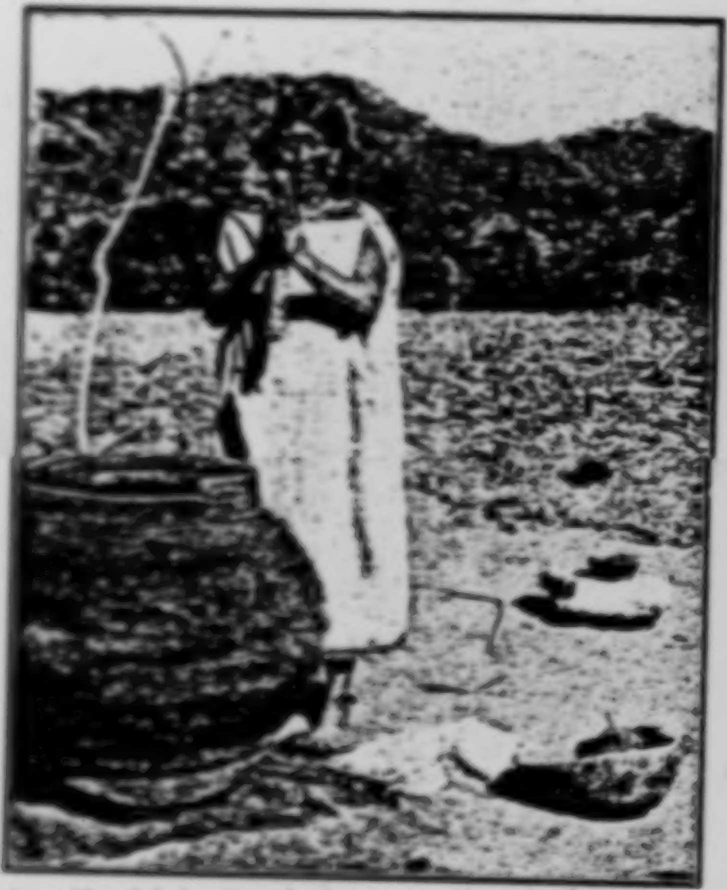

Fig. 63. Fabrication of a large vat: the roll of clay is ready to be superposed on the preceding one.

/393/

Decline of the Art of Pottery among the Chiriguano

323 Of all the Chiriguano industries the most threatened one
178 is doubtless ceramics. The Chiriguano can claim the glory of
415 having been until recently the last Indians of South America
/Fig. 64 appears here/ to have a pottery which deserved to be
included in the number of beautiful manifestations of this art,
so brilliantly represented in certain regions of the continent.
Today things have changed a great deal. Villages in which
one can still find women capable of decorating vessels with
the mastery of former days have become rare and are limited
415 to a restricted area. /394/ It was in the tolderías of the Timboy,
126 the Great Salado and the Little Salado, in the region of Yumbía
178 and in the Igüembé valley (upper Pilcomayo, departments of
Tarija and Chuquisaca) that I was able to collect the finest
specimens in my collection. Elsewhere it was exceptional
/Fig. 65 appears here/ /see p. 166/ to be lucky enough to lay
my hands on a fine piece; and, if I did have this luck several
times, it was almost always a question of an old vessel pre-
[797] served as if by a miracle. The Franciscan missions which
formerly gave Nordenskiöld and Holmberg such fine specimens
797 contributed less toward enriching my collections. Nothing ex-
323 presses the sad state of decline of the Chiriguano better than
415 what I /395/ could observe in the Macharetí mission. After
178 going through nearly all the huts of this large village, which in
[162] normal times has close to 2,000 inhabitants, I could scarcely
acquire five or six *yambuí* having some artistic value. There
[463] were no longer more than three or four women who still knew
how to hold a brush and they had to /Fig. 66 appears here/ /see
p. 167/ provide for almost the whole village. In a few years
the ancient painted pottery will exist only in memory in the
large village where the famous "Captain" *Mandepona* lived.

323 This decline has several causes. The first is the state of
415 profound demoralization in which the Chiriguano are found, the
178 total disorganization of their social life, and the increasing
177 influence of the white men, followed by its corruptive effects;
finally, the introduction of manufactured products, first and
foremost gasoline cans.

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000 first and foremost gasoline cans. Artistic ceramics have become the
323 appanage of a few old women who are not founding a school and who
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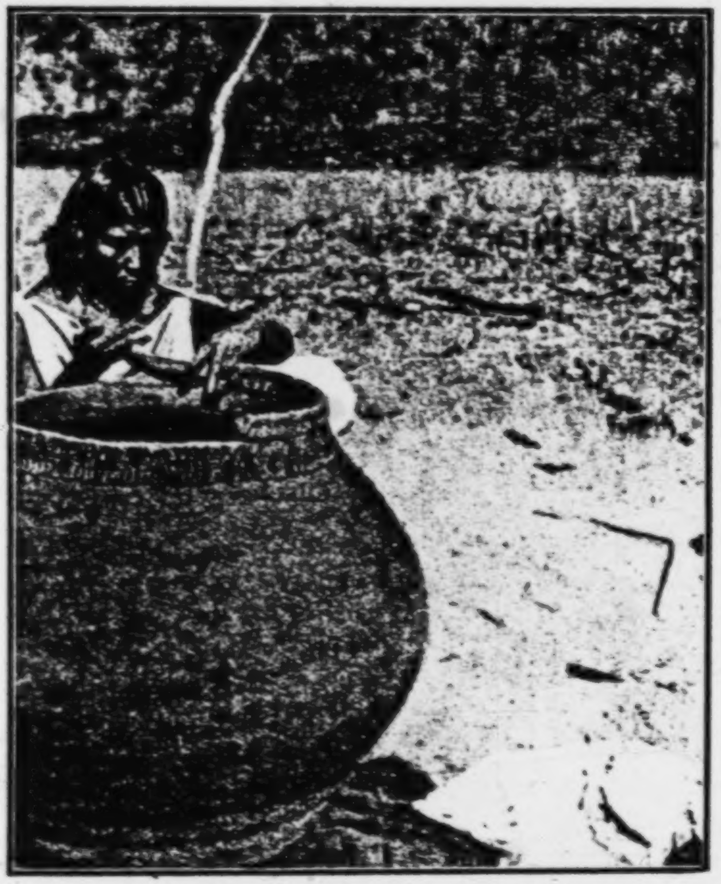

Fig. 64. Fabrication of a large vat: the roll of clay is placed on the preceding one and flattened between the thumb and the other fingers of the potter. Finger impressions result from this, forming a crude design. [531]

323 will carry the secret of their art to the grave. Already today,
178 obliged to satisfy a large demand, they endlessly repeat the same
463
887 motifs and have a vexing tendency to draw them hastily and
531 without any care at all. These designs are becoming awkward,
crude, and are taking on a primitive appearance which is far from
corresponding to the taste and culture of the Chiriguano.

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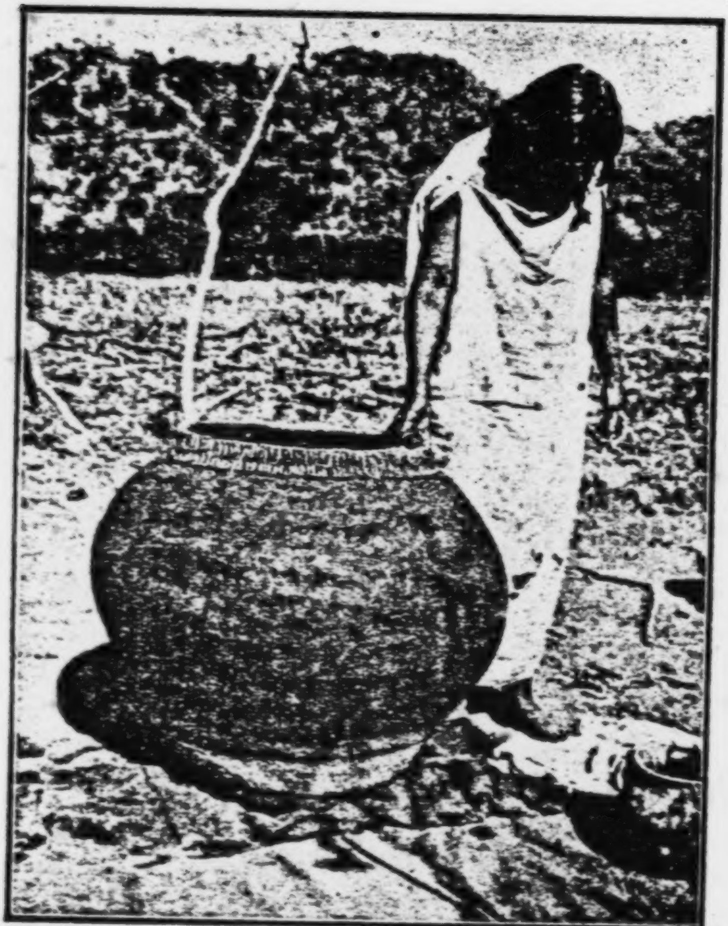

Fig. 65. Fabrication of a large vat: the potter impresses her thumbnail into the still soft clay to obtain a regular design.

463 In some villages there are no more potters. The inhabitants
323 of the toldería of Ibopeytí, for example, have to import the painted
178 vessels they need to celebrate festivals. When I wanted to acquire
439 them, it was generally objected that they had been bought and often
[126] at a very high price. "You go away and leave us without vessels,"
[123] they often used to say to me as a half-joking, half-sad good-by after
my raids.

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178 Without wishing to pass as a prophet, I think I can assign five years of life to the artistic pottery of the Chiriguano. Already it is becoming difficult to make collections of it, at least collections having aesthetic value.

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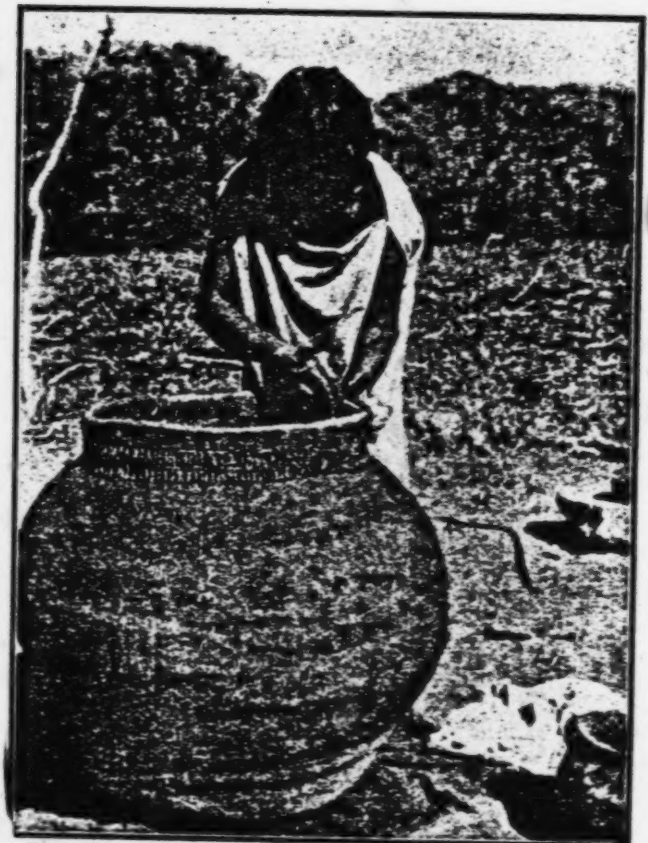

Fig. 66. Fabrication of a large vat: when dry, the clay is polished with a well-polished stone. The purpose of this operation is to avoid all porosity in the surface of the vessel.

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323 The state of decline and regression in which Chiriguano pottery is found explains perhaps the decided differences often existing in the pottery of the various regions inhabited by the Chiriguano. Artists being few, it is not surprising that their output varies little and that, because of this, the vessels of one village are all very much alike.

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323 415 178 184 In former times when artists were not lacking, the number of motifs used within each group must have been larger, and in this variety was doubtless found many an element which today seems to have disappeared, only to be met in another zone. It is probable that an ethnographer who might have made a collection among the Chiriguano a century ago would have established a classification other than the one I have tried to outline here.

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Comparative Study of the Basic Elements of the Painted Pottery of the Chiriguano and Chané Indians

1. The Problem of the Chincha Atacama Civilization

The pottery of the Chiriguano and Chané Indians shows such strong affinities with that of the ancient Andean populations from the point of view of form as well as decoration that their relationship cannot be doubted.

These analogies are especially striking among certain pieces /397/ of pottery dug up in the Quebrada de Humahuaca and the ones still made by Chiriguano or Chané women. With an interval of four centuries the resemblance between the pottery of these two regions is still so pronounced that it had attracted the attention of Mr. Debenedetti (2, pp. 134, 149, note 1, and 156), even though he apparently had for his whole basis of comparison only a few rare pieces of very simple Chiriguano pottery collected in the Chaco and of such uncertain provenance that one of them was attributed to the Choroti. The latter in reality, have pottery of an entirely different type, although also influenced by the Andean civilization.

O C Ce [648] [439] The affinities of Chiriguano pottery with certain pottery of the Quebrada de Humahuaca have been scientifically established by Nordenskiöld (10, p. 143). This scholar explains these surprising similarities very naturally by the influence the Indians of the Humahuaca region had on their immediate neighbors, the Chané or Chiriguano, and by the trade relations these peoples maintained.

C Ce 415 17 648 O [648]

/397 cont./ these peoples maintained. These relations between Chiriguano and Humahuaca Indians are historically attested to. At the time of the uprisings which took place during the period of the Spanish conquest, Humahuaca and Chiriguano united to resist the common enemy (see Boman, 2, Vol. I, p. 77).

The yambuí and yapepo, of which I made a good collection in the upper Pilcomayo region, provide new evidence, even more conclusive, of this striking parallelism which appears between the pottery of the modern Chiriguano and the prehistoric populations of northern Argentina. To allow a direct influence of the Humahuaca Indians on the ancestors of the present-day Chiriguano living on the upper course of the Pilcomayo in the departments of Tarija and Chuquisaca would be a point of view difficult to defend. The radiance of the culture of the Quebrada de Humahuaca could have affected only the southern Chiriguano and the Chané of the Itiyuro. As for the hypothesis which would make of the Chiriguano the precursors of this culture, it is so absurd, so contrary to all good sense, that we cannot envisage it here. At the spot where the Pilcomayo gets ready to leave the valley that it digs across the Andean spurs to spread out in the Chaco plain, the Chiriguano had Chicha Indians as immediate neighbors whose territory extended to the north of the Quebrada de Humahuaca in the south of present-day Bolivia. It was they who transmitted the special forms of their pottery and its principal decorative elements to the Chané, who in turn left them to their successors and conquerors, the Chiriguano. Perhaps the Chané have not everywhere been the inevitable intermediaries between the two cultures; in many cases, Chicha groups must have communicated directly to the Guarani invaders the principal products of their industrial techniques and of their arts.

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/398/ We know from 16th and 17th century documents that the Chiriguano constantly made forays into Chicha territory, that they raided their villages, made them pay tribute, and carried away groups of these Indians into slavery, as they did with the Chané. These direct contacts between the Chiriguano and their western neighbors must have contributed greatly to the spread of Andean civilization among them, and

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17 this explains why the Chiriguano culture of the upper Pilcomayo presents such close affinities with that of the Chicha, the Humahuaca, and the Atacama (1).

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1. On the western borders of their territory the Chiriguano were in constant touch with the Chicha, whose territory they devastated and whom they obliged to pay tribute to them.

Lizárraga (Vol. I, p. 282): "the quality of the valley (of Tarija) being known, and the importance of its being populated, in order to check in that direction the Chiriguanas, who had done no little harm to the Chichas there, and they even paid them tribute, named as corregidor, etc...." /translated from the Spanish/.

Lizárraga (Vol. II, p. 117): "he went to Mosquera and returned, and with more than thirty natives, twenty of them Chiriguanas, and the rest indios Chaneses /Chane Indians/ in service, and among them two more illustrious Chiriguanas, one called Marucare and the other par excellence Inga Condorillo, and another Indian of Chicha nation, whom they confined with those Chiriguanas ..." /translated from the Spanish/.

Archivo de Indias (74-4-1, cited by Coni, p. 19): "and in about a month they reached another nation of indios called chiriguanaes, who thus neighbor this city a dozen leagues from potosí, and they carry off a pueblo of indios chichas who are called chupas." /translated from the Spanish//

Coni (p. 21): "In a letter from the licenciado Matienzo he tells us that the Chiriguanaes continued to raze the plains of Manso and, in addition, made frequent onslaughts on the Charcas, where they

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> acted as masters and lords of the land, even to collecting a tax from the Chicha Indians. If they did not agree to this, they ate them and even 'had public meat markets for human flesh.' " /Translated from the Spanish./

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Chicha women certainly shared the fate of the Chané women reduced to slavery by the bellicose Chiriguano and, like them, brought the secrets of their civilization to their masters. On the upper Pilcomayo I acquired a vessel (Plate XXV), a Panpipe (Fig. 67), and a T-shaped ax (Plate XXIII, 1), found not far from the village of Ibopeytí, well within Chiriguano country. These objects reveal either the existence in this place of an ancient Andean population, Chicha or some other one, which the Chiriguano may have annihilated or assimilated, or active commercial exchanges. In the absence of concrete evidence, the influence of the neighboring Andean tribes would have been demonstrated by the very style of the pottery of this region, which more than that of any other point in Chiriguano territory continues a tradition peculiar to the peoples of southern Bolivia.

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Even today the Chiriguano receive from the half-breed descendants of the Chicha silver objects which probably used to be the object of an age-old traffic, and turquoise beads the latter unearth from the /Plate XXV appears here/ /399/ graves of their ancestors. On their part the Chiriguano go to sell ostrich plumes and pieces of basketry to the half-breeds and Quichua Indians.

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Southern Bolivia is very little known from an archeological point of view. The few excavations which have been carried out there testify that the culture peculiar to the Humahuaca valley continues without appreciable modification. The homogeneity of the civilization which flourished in these vast regions will be even more apparent on the day when the decision is made to undertake the systematic study of this immense territory which includes all the altiplano to the north of the Argentinian frontier and the valleys which form the spurs of the Andes at the edge of the Chaco. It is already evident

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[Text continues on P. 173]

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Plate XXV

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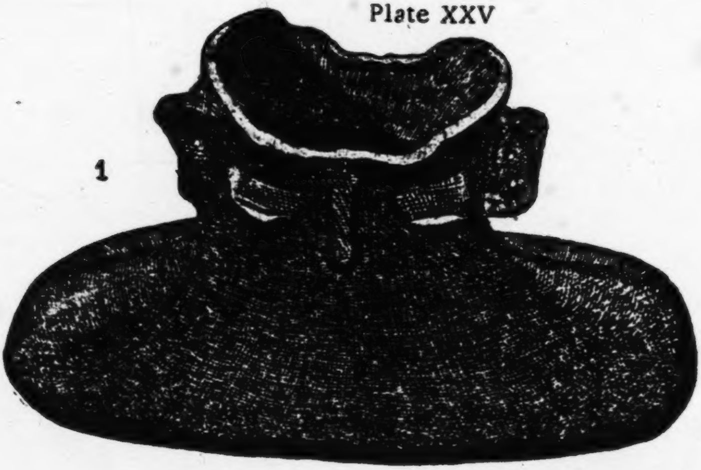

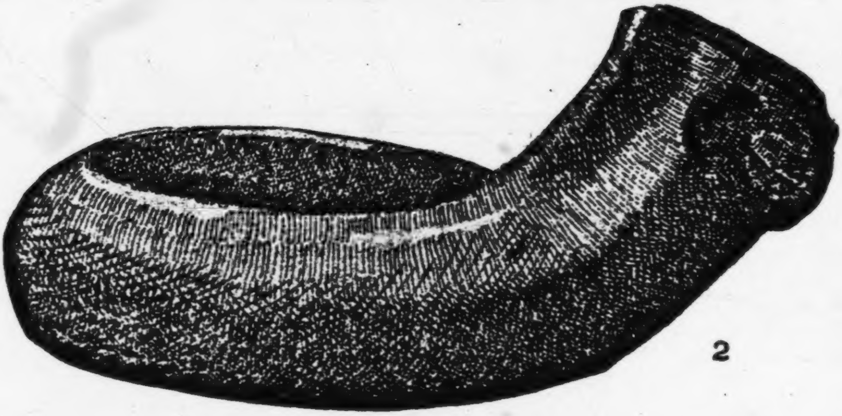

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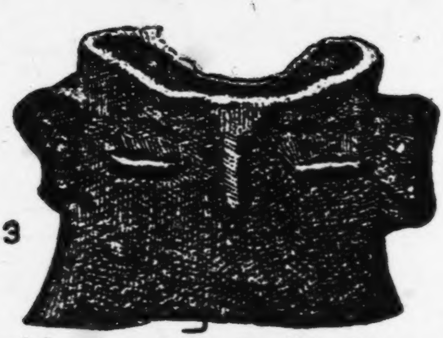

Anthropomorphic vessel found on the banks of the Pilcomayo near the Chiriguano village of Ibopeytí, attesting to the existence in this region of a civilized population before the Chiriguano. The vessel has a red glaze and the ears of the personage are pierced. (1/2 nat. size.)

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'399 cont./ It is already evident that the pottery of the Humahuaca region shows identical characteristics from the north of Jujuy to the vicinity of La Quiaca. To me the local variations seem absolutely negligible. Boman (2, Vol. I, p. 77) was already expressing himself in the following manner on the relations between these two

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regions: "If one wishes to compare the objects dug up in the Humahuaca region with the pre-Hispanic remains of other regions, they would be most like those of the Chichas." At

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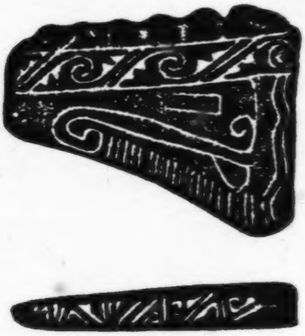

Fig. 67. Panpipe made of olive-hued stone, found on the upper Pilcomayo near the Chiriguano village of Ibopeytí at the same time as the vessel on Plate XXV. (1/2 nat. size.)

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Tolomosa in Bolivia, in the department of Tarija, the von Rosen mission (2, Fig. 175, p. 112) found an ornithomorphic dish, an exact replica of the famous puco of this type discovered at La Paya in the Calchaqui Valley.

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The Humahuaca-Chicha culture does not form an isolated bloc. It is more or less closely related to those whose remains have been studied in the northwest of Argentina in Diaguite territory, on the Puna de Atacama and de Jujuy, in the Atacama Desert, in the north of Chile and the extreme south of Peru. In the geographic area thus defined, it surely seems as though there was formerly a center of acculturation whose existence was pointed out only a few years ago.

Atacama SG5
Prehistoric Argentina SI 3

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172 Boman (2, Vol. II, pp. 767-778) is the first to have defined the specific characteristics of the most important of these cultures from the historical point of view, that of the Atacama. By comparing the objects his own excavations or those of his colleagues brought to light in Calama, in Chiuchiu in the Atacama Desert, and in various localities of the Puna de Jujuy, he could demonstrate the homogeneity of these finds. He rightly attributed all these remains to one single people, the Atacama, whose habitat probably embraced, besides the regions I have just enumerated, the Puna de Atacama and part of the Calchaqui Valley as far as La Paya.

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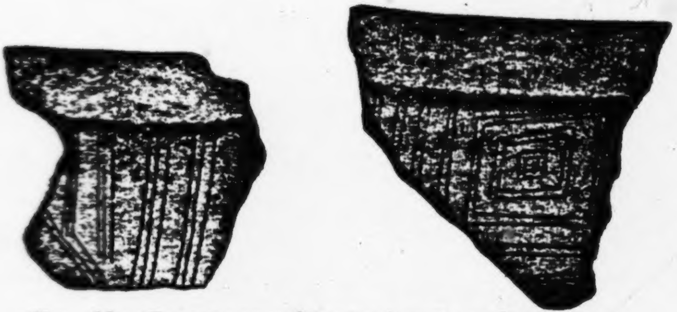

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[178] Fig. 68. Fragments of incised pottery found at Caipipendí. Present-day Chiriguano never decorate their pottery with engraved lines. (2/3 nat. size.)

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172 However, there is one aspect of the problem to which Boman gave too limited a solution. In seeking to determine the frontiers of the ancient peoples of the north and northwest of Argentina, in my opinion he stressed too much the divergences which the remains of their culture present and not enough the traits they have in common. Still, the points of contact are too numerous and too specific to be attributable simply to a great Peruvian civilization from which these civilizations emanated.

Atacama SG5
Prehistoric Chile SG3

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A It cannot be denied that there exist, between the civilization of Atacama and those of the provinces of north and northwest Argentina, of southern Bolivia, and of the coast of Chile, variants important enough to justify the subdivision of this culture zone into separate regions corresponding perhaps to the extent of tribes speaking different languages. But along with these local variations, how many similarities! How many analogies in technical materials and artistic forms! Farther on when I deal with fundamental elements of Chiriguano art from a comparative point of view, I shall have occasion to dwell on some of these resemblances and to give many an example.

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The credit for bringing out the elements common to all these civilizations and seeking to explain them belongs to Uhle (1, 3, 4).

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A /401/ Already in 1913, on the subject of tablets from Chiuchiu, this scholar (Uhle, 1, p. 457) declared "that there had not been only one Atacama civilization, but several belonging to different periods." Several years later, after some systematic excavations he made in Pisagua, Arica, and Tacna, he tackled the "Atacameño" problem as a whole and proposed a plausible solution for it. Since knowledge of the results acquired by Uhle is important for understanding what follows, I believe it necessary to give as complete a résumé of them as possible.

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Near Tacna, Uhle (4, p. 2) collected remains of several superimposed cultures, which he classifies in the following manner:

1. Period of primordial man (objects of paleolithic type);
2. Period of the Arica aborigines (first centuries of our era). The remains of this period belong to a very primitive population of fishermen;
3. Period contemporary with the Chavin ruins, which goes from about the year 400 to 600 A.D.;
4. Tiahuanaco period and continuation of the epigonal style, from about the year 600 to the year 900;
5. Period of the indigenous civilization of Atacama, from the year 900 to about 1100;

Atacama SG5
Prehistoric Chile SG3

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172 6. Chincha-Atacama period, from 1100 to about 1350;

7. Inca period, from about 1350 to the Spanish conquest.

A P.C. 114 172 Of course, Uhle's chronology must be accepted with reservations, and at first sight this division appears to be much too subtle. Besides, the duration of each period seems much too short to me. I also doubt very much that Uhle has really given us proof of the existence of a culture contemporary with the Chavin ruins.

A P.C. 172 Whatever may be the gaps in this chronology and its undeniable weaknesses, it seems nevertheless certain that there existed in Tacna and probably in Arica too a civilization clearly related to that of the region of the Atacama Desert (1) and of the Andean territories we have enumerated.

A P.C. 171 172 A P.C. [291] A P.C. [285] [415] [531]

> 1. Montell (1, p. 41): "With the Arica culture the Calama-Chiuchiu area has many traits in common, unmistakably pointing to these districts being very closely connected, as has also been convincingly shown by Uhle. One quite obvious point of agreement exists in the before mentioned broadshouldered shirts, a type one hardly is able to suppose to have arisen independently in areas so adjacent as these. The technique called 'coiled basketry' is, we know, common to both. The pottery types present, generally speaking, much similarity. In regard to ornamentation one may point to the occurences [sic] of pyrograved spirals in calabashes, and to the ornament here called 'wing-shaped'." /Cited in English./

A P.C. 121 174 172 114 In a strong position from the obvious analogies existing among the objects /402/ found in this geographic area, Uhle established a theory which, even if it is too bold in certain aspects, must nevertheless in its exactness contain a great deal of truth.

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The Atacama Indians, whose original territory would have been the vicinity of the Atacama and Arizaro salt marshes and a portion of the coastal zone near Tocopilla, including the lower course of the Loa River, emigrated at an unknown date from the south to the north. They occupied the provinces of Chicha and Lipez, the region between the great salt marshes of western Bolivia and the western Cordillera, and spread across the whole province of Carangas and the districts west of the Desaguadero. They would also have taken possession of a large part of the Titicaca and the northern plains. Their culture would have spread to the south of modern Peru as far as the latitude of Ica and as far as Ayacucho in the mountains. Upon this ancient ethnic and cultural stratum influences from the north made themselves felt (Uhle, 3, p. 13).

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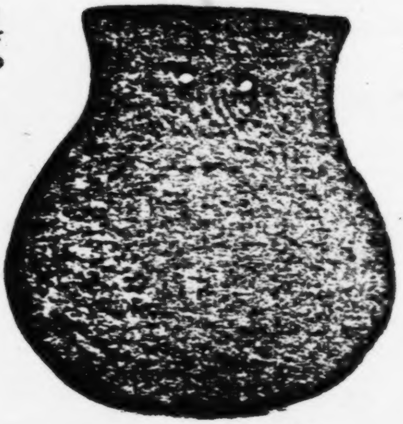

Fig. 69. Pot decorated with incised lines and provided with two holes for hanging. This object was unearthed at Caipipendí. (2/3 nat. size.)

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Atacama SG5
Prehistoric Chile SG3

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172 Still according to Uhle (4, p. 38), in the period following the
174 epigonal period, the inhabitants of Chincha and Ica created a
P.C. culture of a regional character offering close analogies with
172 certain vessels from Tacna, which we shall have to consider. The Chincha Indians were conquerors whose warlike enterprises are often mentioned in the ancient chronicles. According to Montesinos, they made expeditions as far as into Chiriguano country. Before Uhle's discoveries at Tacna and Arica, the limit of the Chincha's area of influence ended at Arequipa. The Tacna pottery which Uhle attributes to the Chincha-Atacama period permits us to extend the civilizing activity of this people to the south.

The ancient civilization of the Atacama enriched by a Chincha contribution would have given birth to a new type of culture to which Uhle gives the name Chincha-Atacama. It would have reached maturity between about 1100 and 1350 A.D.

"The sphere of influence of the Chincha-Atacama civilization reached part of the coast (Pisagua, Taltal), the southern coast, in the east the Atacama region proper from Calama to the province of Jujuy. Its influence extended abroad as far as into Araucan country. In the east its reflections are found /Plate XXVI appears here/ /403/ on numerous remains in the basin of the Titicaca and of Tiahuanaco, and to the north one can follow its advance as far as Cuzco.

"By it are explained the different types of ornamentation in use among the Inca. Chincha-Atacama influence thus embraced a vast region of which part (south coast, Atacama territory proper, the western Bolivian altiplano, conquests directed toward the Cuzco) was passed through by the Chincha-Atacama in person." (Uhle, 4, p. 39.)

A
P.C. Further on Uhle (4, p. 42) adds: "Previously we could not
17 explain the presence of the volutes, jagged triangles, diamonds,
531 snakes, and many other similar motifs in the decoration of the engraved calabashes of Calama, on the vessels brought to light in Jujuy province, and on those of the Pelike type from the Pucará de Tilcara, as well as on the textile now made by the Araucan. Today everything is explained by the extent and influence in distant regions of the Chincha-Atacama civilization."

Chane SF8

Plate XXVI

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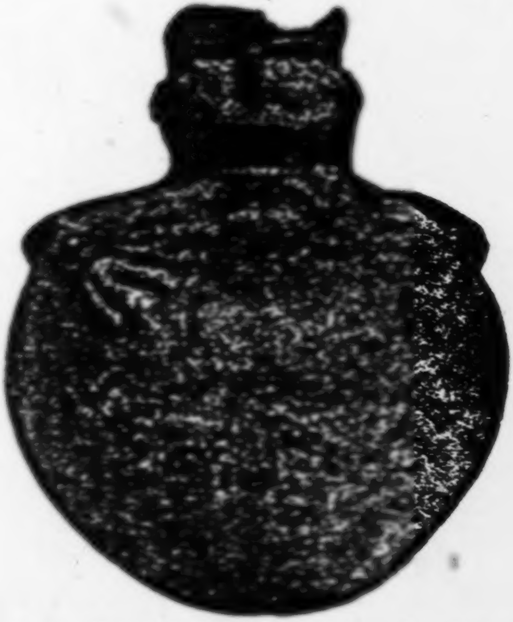

1. Anthropomorphic vessel, Chané. It is covered with a layer of white paint. Prov.: Tuyuntí (near the Aguaray). (1/3 nat. size.)

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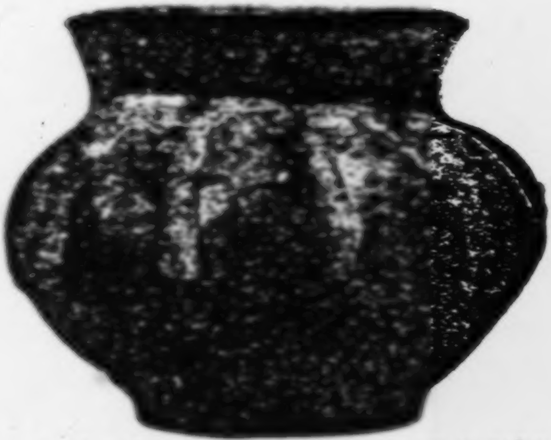

2. Vessel with ribbed belly, brown in color. Chiriguano Prov.: Caipipendí. (1/2 nat. size.)

Atacama SG5
Prehistoric Chile SG3

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Latcham (p. 5) says that for a long time he has also had the impression that Chincha culture had played a very important role in the development of the prehistoric art of the north and center of Chile, especially in the Diaguito-Chilean region, that is, the provinces of Atacama and Coquimbo, and that these influences had extended as far as Cachapoal in the south.

After the publication of Uhle's work, Latcham (p. 20) not only accepted his conclusions but even demonstrated the extension of Chincha culture as far as Caldera. Like Uhle, Latcham (p. 20) is of the opinion "that an examination of Diaguito-Argentine pottery would furnish proof that the traces of Chincha and Chincha-Atacama influences are very common in the art of northwestern Argentina, where all the designs reproduced (by Latcham) are found again alone or in combinations with other local motifs. These influences made themselves felt as far as the southeast and even the northeast of Bolivia, as can be ascertained by consulting the works dealing with the antiquities of these regions. In the modern pottery of the Chiriguano many of these same elements persist, as one can realize by leafing through the work of Outes, 3."

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In the pages which follow I shall seek to demonstrate that Chiriguano pottery presents characteristics obliging us to rank it among those which seem to have undergone the influence of the Chincha-Atacama civilization.

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Even if the hypothesis of the existence of a Chincha-Atacama civilization must be rejected some day, it is not any less certain that at a given moment the prehistoric tribes of the region of Atacama, of the northern coast of Chile, of the south of Peru and Bolivia, and of the north and northwest of Argentina were united by close relations, which /404/ explain the numerous points of contact of their cultures. Uhle's theory has on its side the advantage of accounting for these analogies whatever may be the reservations we might be able to formulate concerning the date this scholar attributes to the Chincha-Atacama civilization. Concerning the importance and the extent he gives it.

Chane SF8
Atacama SG5
Prehistoric Chile SG3

/404 cont./

CUD A PC 172 177 121 concerning the importance and the extent he gives it. To the Chincha-Atacama sphere of influence belongs, precisely, the culture of the Andean Chincha and Humahuaca peoples whom the Chiriguano and their Arawak predecessors had as neighbors for centuries.

C Ce 415

2. Analysis of the Influences Exerted on the Fancy Pottery of the Chané and the Chiriguano

C Ce [121] The criterion of form. -- The influences which have made themselves felt on Chané and Chiriguano pottery are manifested in both form and decoration. In the pages to follow I propose to note the most striking affinities between Chiriguano and Chané vessels and those of the neighboring regions, and also to determine the importance of Guarani or other survivals which we meet here and there.

C Cs [171] 1. Vessels with a subglobular belly, short neck, flared lips, flattened base, constitute the most common type of fancy pottery (Plates XXXV-XL, XLVII-LIII, etc.). Pottery of this category lacks well-characterized counterparts in the Andean zone. On the contrary, they resemble the jars for kaſiri still used by the Indians of Guiana and the Amazon (Koch-Grünberg, 2, Vol. II, Fig. 151, p. 227).

C 415 One of the yambuí (Plate XLVIII, 3)[1] of this type has as handles on each side of the neck two little miniature vessels of the same form as itself. In what is perhaps only the fancy of a native artist appears nevertheless a concept peculiar to the Andean peoples and one in harmony with their style.

C [171] 2. The yapepo (Plate XLV, 1 and 2; LIX and LX)[2] are subglobular vessels with a low neck, provided with a handle which extends from the rim to the belly; they can be considered as yambuí in miniature. This category of vessels has its equivalent in several points of the adjoining Andean zone. Thus in Calama (Atacama Desert) and in Cagua (Yura canton, Porco province) pots have been found which seem to be, from the point of view of form, replicas of Chiriguano yapepo. (Créqui de Montfort, Plate VII, Fig. 8, and Plate VIII, Fig. 11.)

[1] [See p. 227 -- Analyst]

[2] [See pp. 221, 244 and 245 respectively. Analyst]

OA /404 cont./

415 172 The cemeteries of the Isla de Tilcara have given numerous specimens of this type (Debenedetti, 7, Fig. 98, p. 153; Fig. 101, p. 154; Fig. 104, p. 157; Fig. 108, p. 158; Figs. 110-111, p. 162; Figs. 113-114, pp. 165-166), of which a specimen
C 415 171 has also been found in the Alfarcito in the Quebrada de Humahuaca (Debenedetti, 4, Fig. 15, p. 29). /Plate XXVII appears here./

C 415 171 /405/ Vessels whose appearance is obviously similar to that of our yapepo were formerly used in Chile (Latcham, Fig. 17, p. 13).

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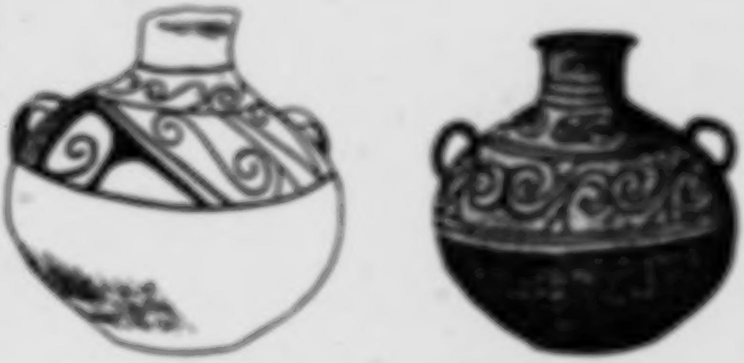

Fig. 78. The iru[a] (a), drawn from Debenedetti, was found on the Isla de Tilcara. Vessel b is modern. It comes from the Chiriguano village of Yumbia. It attests to the fidelity with which the Chiriguano have kept to our day the ancient types of Andean pottery. (1/5 nat. size.)

C 815 171 3. The large yambui of Plate LV, 2,[a] is not a common type in South America. Jijon y Caamaño (p. 26, Fig. 13) cites only one specimen, coming from Imbabura in Ecuador, which was known to him outside of Chiriguano country.

4. The two yambui of Plates XLI, 1,[a] and LV, 1,[b] both come from the Ivu mission. Their form is unusual in Chiriguano country, but very interesting by reason of the analogy it offers with that of vessels dug up in Catamarca province in Caspinchango (Debenedetti, 5, Figs. 9 and 10, pp. 23-26) and that of funerary urns from La Rioja discovered and published by Boman (3, Fig. 43, p. 36).

[a] [See p. 299. Analyst]

[a,b] [See pp. 317 and 297 respectively--Analyst]

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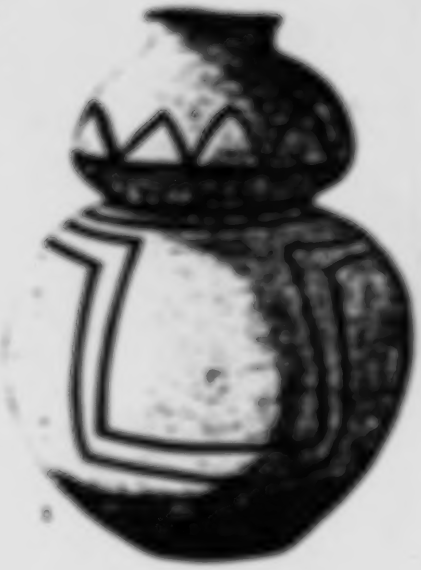
Plate XXVII



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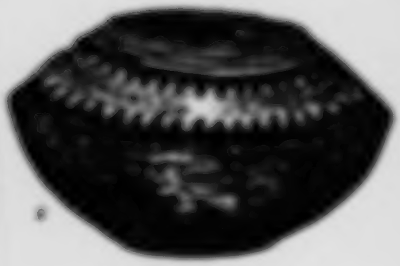

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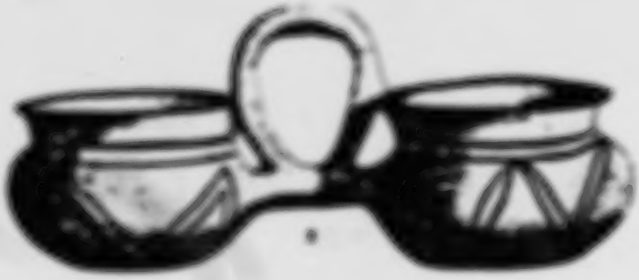

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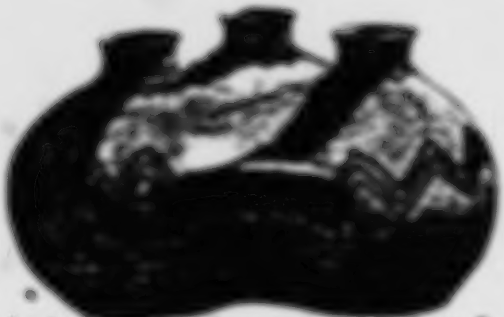

4

Chiriguano vessels (cambuchí). From: 1 and 3, Ivuz; 2, Macharetí; 4, Caipipendi. Colors: 1 and 2, black on white; 3 and 4, red on white. (Dim. 1 = 1/6; 2-4 = 1/3 nat. size.)

C /405 cont./

415 171 8A [415 172] Ce [415 171] 8A [415 172] C 8A 415 171

5. The iru of Fig. 70 b goes back into the class of the vessels known as pseudo-apods, as some Argentinian archeologists call them. As their name indicates, they are closely related, from the morphological point of view, to the vessels known as apods or more simply aryballuses, which constitute in northwestern Argentina so many concrete proofs of Inca influence. Among the Chiriguano and Chané this type of pottery is exceptional, and the specimen of Fig. 70 b is a unique piece whose interest is considerably increased by the extraordinary resemblance it bears to a vessel discovered in the cemeteries of the Isla de Tilcara (Fig. 70 a). These two iru have so many similarities between them that one could easily believe them to have come from the hands of the same artist. In the regions near the habitat of the Chiriguano numerous vessels of this type have been dug up. Odilia Bregante (p. 287) /406/ enumerates for the specimens found in Jujuy province the following localities: Saruga, Taranta, Pucará de Tilcara, Isla de Tilcara, and Cochinoca, for the Puna de Atacama, Antofogasta de la Sierra. In La Paya in Salta province these aryballuses or aryballoid vessels are very numerous, and one of them published by Ambrosetti (6, Fig. 42, p. 62) has on the upper part of the belly a row of triangles with volutes, which we find again on our specimen from the upper Pilcomayo.

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Vessels of this kind are, as we have said, characteristic of the Inca civilization. Similar jugs already appear in Tacna during the Chincha or Chincha-Atacama period (Uhle, 4, Plate XVII, Fig. 4; Plate XIX, Fig. 1 and 1 a; Plate XX, Figs. 1 and 2). /Fig. 71 appears here./

C [179]

This type is so little diffused in Chiriguano country that one could not invoke its occasional presence to attest to the strong Inca influence of civilization on these Indians.

C [179]

6. The miniature vessel of Figure 71 is also a unique piece. If its distribution on the eastern slope of the Andes were not so sporadic, it would constitute an eloquent proof of the persistence of Inca tradition in Chiriguano pottery. Actually, as Linné (1, p. 161) demonstrated with the aid of

C /406 cont./

415 a map, these footed vessels "bakershaped" /quoted in English/
171 mark out the whole extent of the Inca Empire from Ecuador to Chile and Argentina. This is the first time, however, that their presence has been noted among the Chiriguano and outside the borders proper of the Inca Empire.

C
[177] 7. As Nordenskiöld (10, Fig. 48, p. 162) established, the twinned Chiriguano vessels (Plate XXVII, 3)[1] also denote an Andean influence. As for that, it suffices to compare them with the ones from the Quebrada de Humahuaca (Debenedetti, 2, Fig. 144, p. 196).

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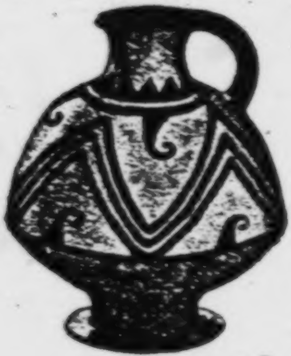

Fig. 71. Miniature footed vessel. Prov.: Cuevo. (2/5 nat. size.)

C
415 8. As for the vessels consisting of triple connected bodies
171 (Plate XXVII, 4), Jijon y Caamaño (p. 26) believes them to be of Central American origin. "Their center of dispersion," he says, "must be located in a southern region of Central America, from where, perhaps through the medium of the Arawak, they arrived in the Chaco and Peru." This hypothesis is tempting.

9. The Central American origin of the footed bowl or "compote" (Fig. 72)[2] could not be doubted. Jijon y Caamaño
C
A (pp. 31-51), Rivet (2, pp. 8-9), and Linné (2, Map 6, p. 107)
415 have amply demonstrated it. On the subject of one of the
171 varieties of this type, Jijon y Caamaño (p. 34) makes the

[1] [See p. 183 -- Analyst]
[2] [See p. 187 -- Analyst]

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A /406 cont./
415 following observation: "The dispersion and evolution of a type
,171 of pottery whose /407/ origin must be assigned to the peoples near the Isthmus of Panama can be due only to the Arawak, who spread it among the nations living beyond the Andes, in regions as southerly as the Chaco and the territory of Misiones (1).

> 1. Ambrosetti (2, p. 714) as a matter of fact represents Kainguá vessels with a circular foot. I doubt very much that these pots reproduce a primitive type. They are badly fired, badly modeled, asymmetric, and the foot, which is fastened to the vessel when the latter is finished, is easily detached from it.
>
> These vessels are perhaps crude imitations of European pottery.

A
171 In South America the Arawak have been the propagators of Central-American culture among the primitive tribes located
C east of the Andes."
A
415 10. The distribution of vessels with a ribbed belly, of
171 which I acquired a marvelous specimen in the Caipipendí
C valley (Plate XXVI, 2),[2] is almost the same as that of the
[126] "compotes," and we can, as with the latter, rank them with the pottery which shows a Central-American origin /Fig. 72 appears here/ and whose dispersion was the work of the Arawak (Jijon y Caamaño, p. 5, Fig. 1 D).

C 11. The vessel of Plate XXVII, 2[2] is composed of two
415 superimposed domes: one in the shape of a truncated cone,
171 the other rounded. It comes from Ivu and is the only specimen
C of this form that I encountered in the course of my trip. An
[172] identical vessel was dug up on the upper Paraná by Ambrosetti (3, plate between pp. 2[illegible]6-257, Fig. 5). Similar receptacles are still in use by the Yuruná /Yuruna/ Indians of the lower
C Xingú (Steinen, 1, plate between pp. 266-267). The presence
G
415 of vessels of this type among the ancient Guarani authorizes us
171 to suppose that our specimen from Ivu represents /408/ the
172 survival of an ancient form of Guarani pottery which the Chiriguano have not abandoned.

[2] [See p. 179--Analyst]
[2] [See p. 183--Analyst]

/408 cont./

000 Chiriguano have not abandoned. It is not out of the question,
CC
415 however, that the Chané did not contribute toward preserving
171 this type,[1] if it was really they who made it known to the populations
C of tropical America east of the Andes. Jijon y Caamaño
[415] (pp. 11-13) studied its distribution in the two Americas and
[171] placed its center of diffusion in Central America. In Diaguite
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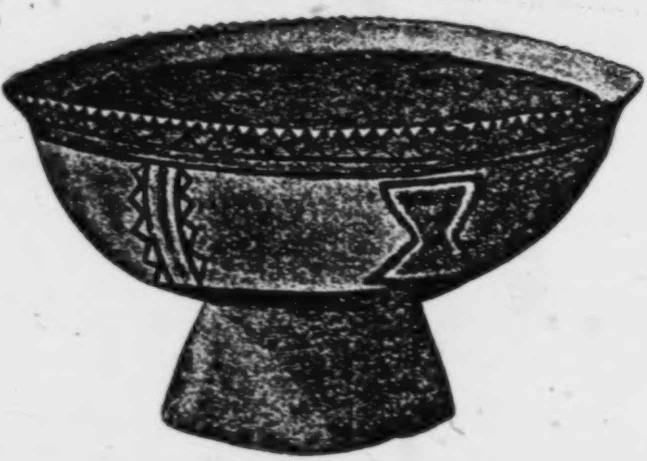

Fig. 72. Footed bowl or "compote." Black and red motifs on cream background. Prov.: Carurutí. (1/3 nat. size.)

C
415 In Diaguite
171 country we find pottery of a more or less similar aspect, but
D which must nevertheless be eliminated from this category.
415 It is indeed provided either with a tongue-shaped appendage or
531 with an anthropomorphic or zoomorphic figuration (Ambrosetti, 6, pp. 372-380).

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[1] [i.e. The type depicted in plate XXVII, 2, p. 183 -- Analyst]

/408 cont./

415 171 172 12. The ornithomorphic vessel of Figure 73 seems to have come from the hands of the ancient potters of the Isla de Tilcara who, several centuries ago, used to make analogous pieces, without a doubt servilely imitated by the Chané and the ancestors of the Chiriguano (see Debenedetti, *2*, Figs. 139-141, p. 191). Boman (*2*, Vol. II, p. 786, Fig. 193) also publishes a bird-shaped vessel, perhaps of the *pavo del monte* (*Penelope obscura, Vieill.* ?), found not far from the present-day village of Humahuaca and which, in addition to its general appearance, has in common with our specimen

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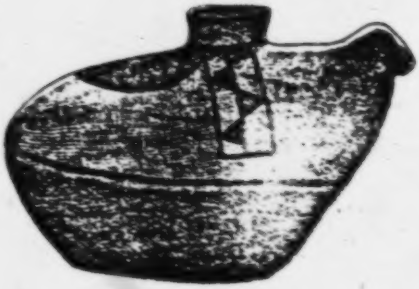


Fig. 73. Ornithomorphic vessel. Chiriguano. Motifs: pink and green. Prov.: Tarairí. (1/3 nat. size.)

415 171 172 from Tarairí designs painted on the sides which represent the wings and tail.

415 532 [273] [172] [171] [114] The Chiriguano Indians of the Caipipendí valley and the Ivu mission still like to serve *chicha* in vessels to which they give the appearance of a bull (Plate XXVIII, 7-9).[2] Llama-shaped vessels have been discovered in the Quebrada de Humahuaca (Debenedetti, *4*, p. 27, Fig. 14, and Odilia Bregante, Fig. 132, p. 147). Perhaps these are the prototypes of the present-day Chiriguano specimens. Why suppose that these receptacles had solely ritual usage, as Mr. Debenedetti thinks, when one sees the modern Chiriguano make an entirely secular use of them?

[2] [See p. 190--Analyst]

Chane SF8
Prehistoric Ecuador SD3
Prehistoric Chile SG3

P.C. Ce 415 171 532 /408 cont./

13. The marvelous vessel of Plate XXVI,[2] 1 is entirely of Andean inspiration. The idea of giving the shape of a human head to the neck of the yuro was not foreign to the ancient populations of the Quebrada de Humahuaca (Boman, 2, Vol. II, Fig. 190 and Plate LXXXII, Fig. f; and Debenedetti, 2, Fig. 136, p. 186). Up to the present time this region has not provided any vessel of this type which, by its beauty and the sureness of the modeling, /Plate XXVIII appears here/ C [415] /409/ was comparable to our specimen from the Itiyuro. The woman who fashioned it was a worthy artist.

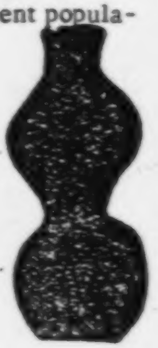
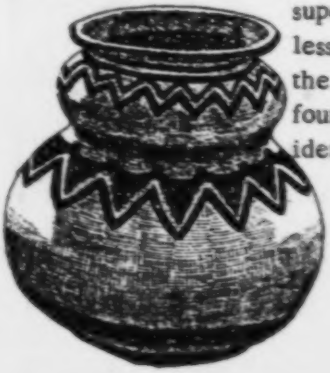


Fig. 74. Vessel painted red. Prov.: Carurutí. (1/4 nat. size.)

P.E Ce 415 171 532 In Ecuador, vessels with a globular belly surmounted by a human head are frequent, but few specimens from this region can compete with this Chané masterpiece.

C 415 171 172 14. The vessels of Figures 74 and 75 and Plate XXVII, 1,[2] are characterized by a narrowing which separates them into two superimposed globular bodies of more or less similar diameter. In the valley of the Loa River a vessel of similar type was found which presents the most surprising identity with the one of Figure 74. Montell (1, Fig. 34 e, p. 28), who publishes it, makes the following remarks about it:

[Text Continues on P. 191]



[531]

Fig. 75. Vessel decorated with red and black motifs. Prov.: Caipipendí. (2/5 nat. size.)

[2] [See p. 179--Analyst]

[2] [See p. 183--Analyst]

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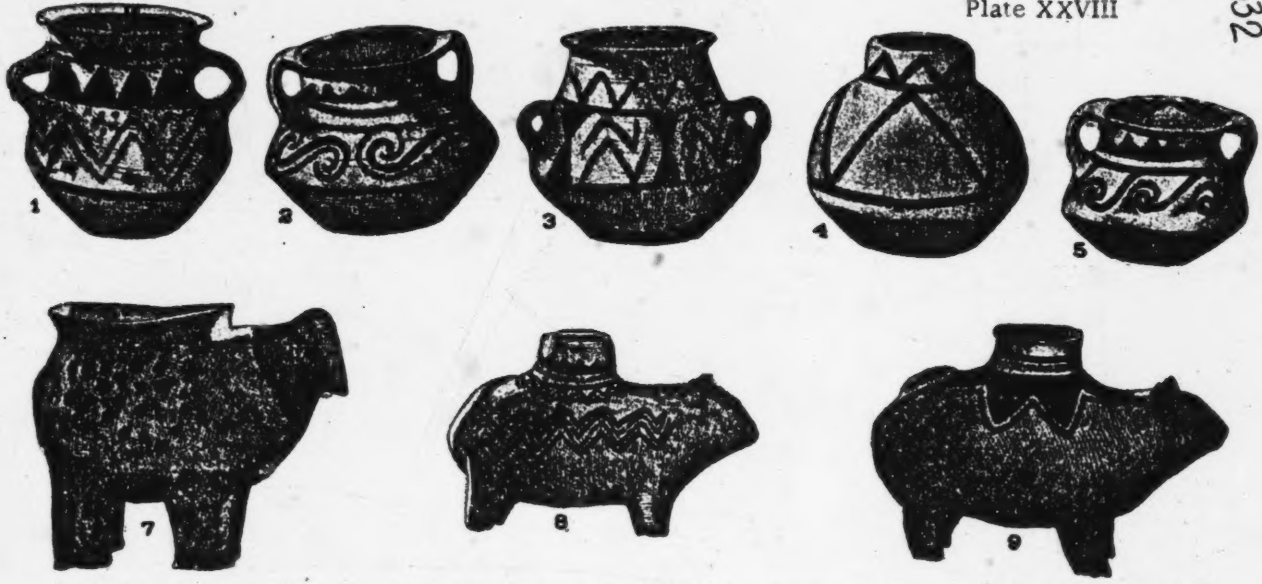
Plate XXVIII



Miniature Chiriguano vessels (toys and amusing objects). Prov.: 1, Ibopeytí; 2 and 5, Yumbía; 3, Tintapaw; 4, Tarairí; 7-9, Carurutí. Colors: red brown and black on white background, except Nos. 4 and 7, red brown on white. (Nos. 1 and 4 = 1/2; 2, 3, 5-9 = 1/3 nat. size ±.)

1: Métraux--190 E-5 (1929) 1930 SF10 Chiriguano SF10

/409 cont./

415 "This particular form is not unique. It is found in the
171 northern cultures of the coast of Peru and its area of dispersion
172 stretches as far as Pachacamac and Ancon, including Lambayeque, Cajamarca, and Trujillo. East of the Andes, this type exists among the Chiriguano, the Ashluslay, and the Lengua. Specimens of it have been dug up by Debenedetti in Tilcara and in the Quebrada de Humahuaca. The find of the Loa River contributes to forming a link of this distribution uniting the /Fig. 75 appears here/ /see p. 189/ eastern zone with that of the Peruvian culture whence this type surely emanates.

Pots of this type show a striking resemblance to the signal trumpets of Guiana. Objects of this kind have been described by many authors and depicted by Gumilla and Roth. If one disregards the mouth and the base, one cannot distinguish these vessels from the terra-cotta trumpets. It is probable that this instrument was discovered independently in Guiana. In any case it is still too early to present theories on the possible connections between the two types, without preliminary research having been done to justify such comparisons."

To the distribution indicated by Montell must be added Molino del Puesto and Caspinchango in Catamarca province (Bruch, 2, Fig. 42, p. 54, and Debenedetti, 5, Fig. 14, p. 27).

415 15. Jugs with a globular belly or one in the shape of a
171 truncated cone, with a short and narrow cylindrical neck from which often begins a small handle attaching at the other end /410/ to the belly of the receptacle (Plate LVI, 1, 2, and 4; Plate LVIII, etc.),[1] make up a very common type in all of the Chiriguano region which is in the hands of the missions. Up to the present the neighboring territories have not produced prehistoric vessels which could have served as models for the Chiriguano or the Chané at the time when Andean influence made itself felt on them. The only jug belonging to this type, outside Chiriguano country, is one found in Chile in Valdivia, which Medina (Fig. 184) reproduces in his great work on the antiquities

[1] [See pp. 238 and 240 respectively-- Analyst]

Prehistoric Argentina SI3

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/410 cont./

415 171 of this country (1).

P.A. [415]

1. Vessels of this type also show great similarity to the Araucan ones which were discovered in the Argentinian territory of the Neuquén. (San Martin, pp. 10-15, pp. 131 and 132.)

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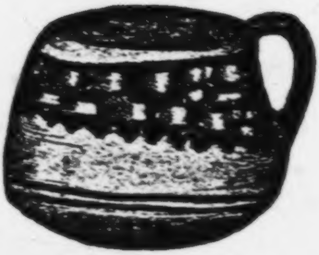

Fig. 76. Cup decorated with black checkerwork on cream background. Prov.: Igüembé Valley. (1/3 nat. size.)

C 415 171

16. The little cup of Figure 76 is the only one of this shape I was able to collect. Like the vessels examined thus far, it constitutes by its aspect and decoration an Andean survival. Many cups have been discovered in northwestern Argentina. Some of these specimens have been found on the Isla de Tilcara (Debenedetti, 2, Fig. 149, p. 206) and at Casabindo in the Puna de Jujuy (Lehmann-Nitsche, Pl. IV, 5 D).

P.A. [172] [415]

17. Bowls have such a wide distribution in South America that their presence among the Chiriguano would not by itself be a sufficient argument to demonstrate the Andean origin of their culture. However, among these Indians, the numerous specimens of this category of receptacles found in each village show such similarities with the puco of the adjoining Andean regions that we are obliged to consider them as borrowed forms.

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C /410 cont./

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171 Thus, for example, the puco of Plate XIX, 2 and 4[1] are nearly identical with certain dishes coming from La Poma, Salta province. (Dillenius, Fig. 7, p. 13.)

The Chiriguano puco (Fig. XIX, 3) could easily be mixed with a specimen from La Paya (Ambrosetti, 6, Fig. 185, p. 368), which, like it, has two nipples on each side of the rim.

C
[531] The small bowl of Figure 77 carries on the rim two heads of a mammal stylized to the point that one can identify it as a llama or a puma, as one wishes. The two appendages in relief are perforated to allow a suspension cord to pass through. One would never finish enumerating all the receptacles of the Andean region which are decorated with the same motif. I shall limit myself to citing, in the countries adjoining the habitat of the Chiriguano, /Plate XXIX appears here/ /411/ several analogous finds. Thus, a dish of this type was dug up at Casabindo, on the Puna de Jujuy (Ambrosetti, 4, Fig. 49 b, p. 39, Vol. LIV) and at La Paya (Ambrosetti, 6, Fig. 181, p. 364).

P.A.
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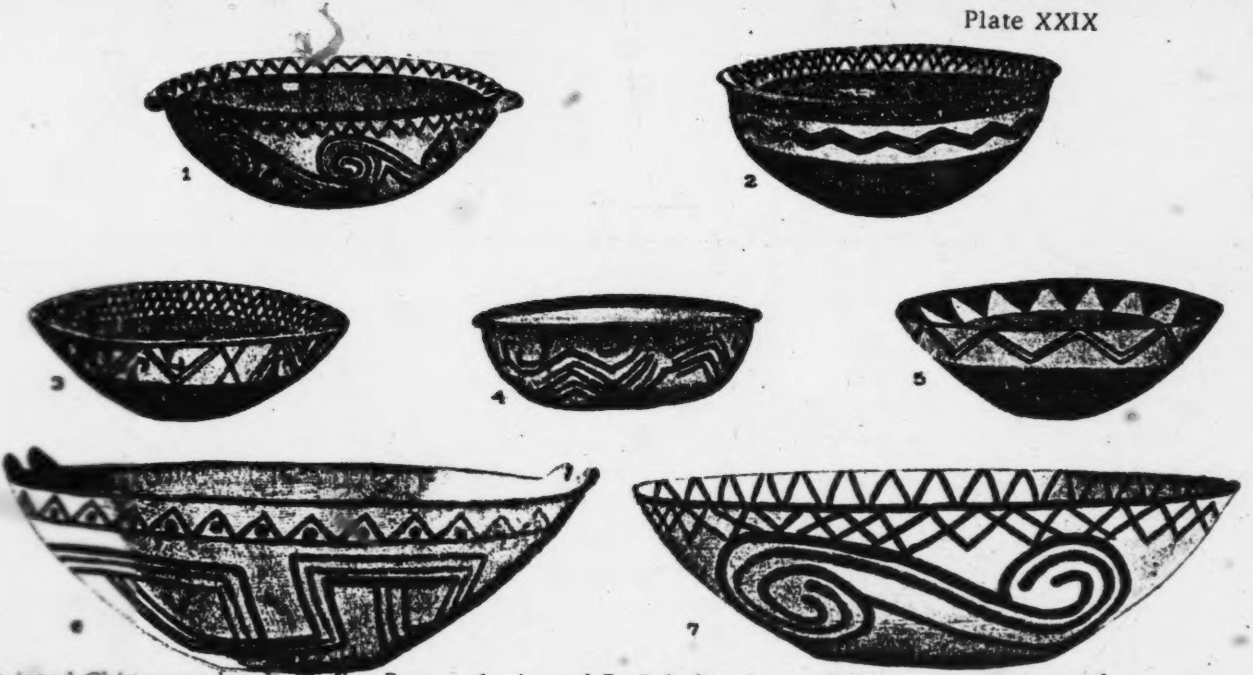
531 Several bowls (Plate XXIX, 1 and 6) of my collections are provided /Fig. 77 appears here/ with small nipples on the sides, whose use is, at first sight, enigmatic. As Rosen (2, p. 109, Figs. 167-188) has demonstrated, they are appendages which permit passing a small cord around the dish and hanging it. On some Chiriguano specimens these protuberances are perforated and a string passed through. By this means, /Fig. 78 appears here/ the bowl is suspended from the roof beams. Several from the Quebrada de Humahuaca (Debenedetti, 2, Figs. 60-63, pp. 111-112) also show these protuberances, whose use must have been the same as among the present-day Chiriguano. These nipples are doubtless handles or ears which, having lost all practical usefulness, were reduced /412/ to the state of simple ornamental motifs and not, as was believed, of still embryonic handles.

P.C.
[415]

[1] [See p. 135--Analyst]

Plate XXIX



Painted Chiriguano bowls (naé). Prov.: 1, 4, and 7, Saladito (upper Pilcomayo); 2, Yumbía; 3 and 5, Tintapaw (upper Pilcomayo); 6, Ivu. Colors: black and red on white background. (Nos. 1-5 = 1/4; 6 = 1/3; 7 = 1/2 about nat. size ± .)

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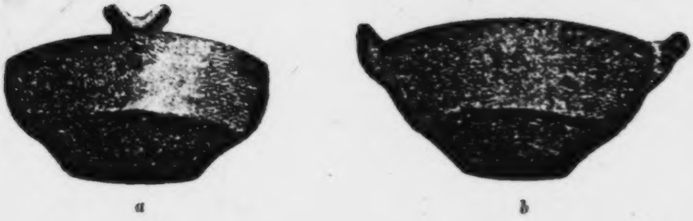

Fig. 77. Small bowl with zoomorphic ear and hole for hanging. Prov.: Caipipendí. (1/3 nat. size.)

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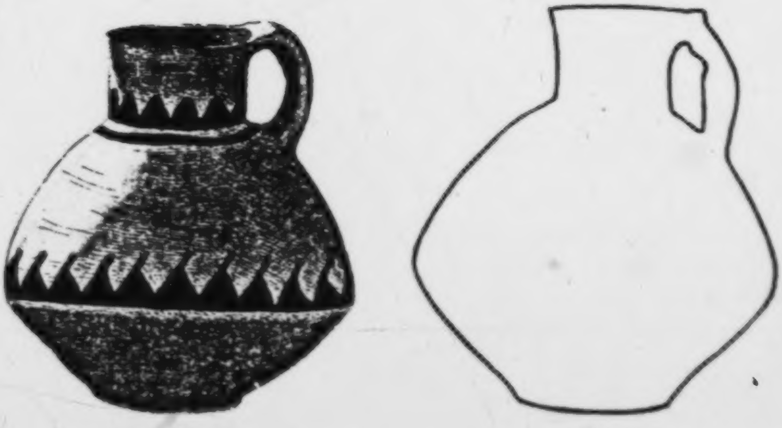

Fig. 78. a and b. Vessel a comes from Cuevo; b gives the profile of a vessel found at Tacna and attributed by Uhle to the Inca period.

Chane SF8
Arawakan Indians SR6
Guarani SM4
Peruvian Prehistory SE4

/412 cont./

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18. To put an end to these comparisons, I shall call attention to two vessels (Fig. 78 a and b), one acquired in Ivu in the Chaco and the other in Tacna, and dating from the Inca period (Uhle, 4, Plate XXVIII, 2). A simple glance at the two figures permits the establishment of their perfect identity.

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In short, from these comparisons and the ones we made on the subject of pottery in common use, we can draw the following conclusions: Chiriguano and Chané pottery is, from the morphological point of view, closely related to that of the ancient populations of southern Bolivia and northern Argentina and therefore offers numerous points of contact with the

C
Ce
[177]

Chincha-Atacama civilizations. It still keeps traces of strong Inca influences (footed vessel (baker-shaped /in English/), aryballoid jars, ornithomorphic and anthropomorphic vessels, bowls, etc.). The ancient Arawak ethnic substratum is mani-

A
[415]

fested in this sphere by the survival of several special types of pottery (vessels in the form of beakers or bowls (compoteras), vessels with a ribbed belly, vessels with three connecting bodies, etc.).

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The pottery in everyday use is clearly of Guarani inspiration and in its general features has remained identical to those of the ancient Guarani of Bolivia.

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Comparative Study of the Principal Decorative Motifs of Chiriguano Pottery and That of the Neighboring Andean Peoples

The triangle with volute. In the region of the upper Pilcomayo the fundamental motif of pottery decoration is the triangle whose apex is prolonged in a volute or spiral (Plates XXXII-XXXIII,[1] 136-199). This decorative element is repeated to repletion on all the vessels I collected from the village of Saladito to the valley of Igüembé. Elsewhere it becomes less frequent and takes on a more rudimentary form, which can be considered as further developed or degenerated.

[1] [See PP. 200-201 -- Analyst]

/412 cont./

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Even on the upper Pilcomayo this design occurs in many variations according to the place or the artists: on certain pieces the volute which prolongs the triangle is clearly drawn (Plate XXXV, 1; XXXVII, 2; XXXVIII, 2[1]; etc.); on others it is no more than a hook more or less closed (Plate XXXII, 137-151). This last case is more usual. Finally, the hook itself is drawn with so little care that it is transformed into the simple arc of a circle, then into a straight line prolonging one of the sides of the triangle (Fig. 78 a).

Some vessels, generally outside the upper Pilcomayo region, /Plates XXX-XXXIV appear here/ /413/ present the same motif, but instead of the hook or the spiral the potter has painted a fret element (Plate XLI, 2, and XLIII, 1; LIV, 1 and 4)[2] more or less well executed. Thus one can follow the evolution of the spiral to the fret by going from one point to another of Chiriguano territory.

Most often these triangles with a volute are arranged in two rows and face each other alternately. When such an arrangement occurs, the potter always takes care to draw, along the line forming the volute, a parallel line of a different color, which, after following the inflections of the volute, goes to join that of the facing triangle. The figure (Plate XXXIII,[3] 178-194) thus obtained is a double volute in the form of a couchant S. It is particularly characteristic of the pottery of the upper Pilcomayo and the Igüembé valley. This double volute perhaps can be treated as an independent decorative element, witness the yambui of Plate XXXVI, 2, and LI, 3.

531 Sometimes, but rarely, the triangle with a double volute is replaced by an angle whose sides, by being drawn out, form a continuous line which unites these motifs to each other (Plate XXXVI, 1; XLVII, 3; LIII, 3).[4]

[191] The origin of this motif is lost in the night of time. It appears already very stylized on the vessels of the Tiahuanaco period, coming from Tiahuanaco itself (Posnansky, Plate III, Figs. E and F) and from the Mizque valley (Nordenskiöld, 5, p. 95, Fig. 40).

[1] [See pp 211, 213 and 214 respectively--Analyst]
[2] [See pp. 217, 219 and 233 respectively--Analyst]
[3] [See p 201--Analyst]
[4] [See pp 217, 226 and 236 respectively--Analyst]

1: Métraux--198 E-5 (1929) 1930 SF10 Chiriguano SF10
Chane SF8
Plate XXX

C
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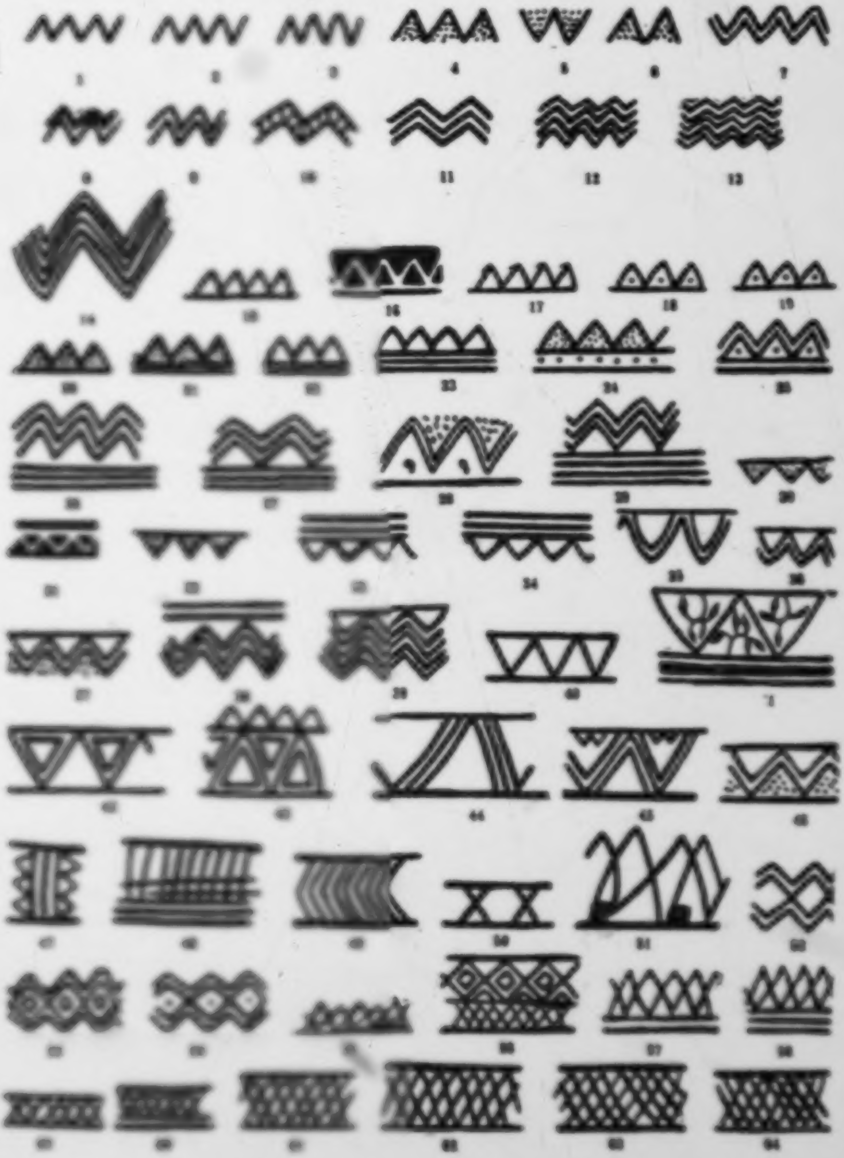

Principal decorative motifs of Chiriguano and Chané pottery.

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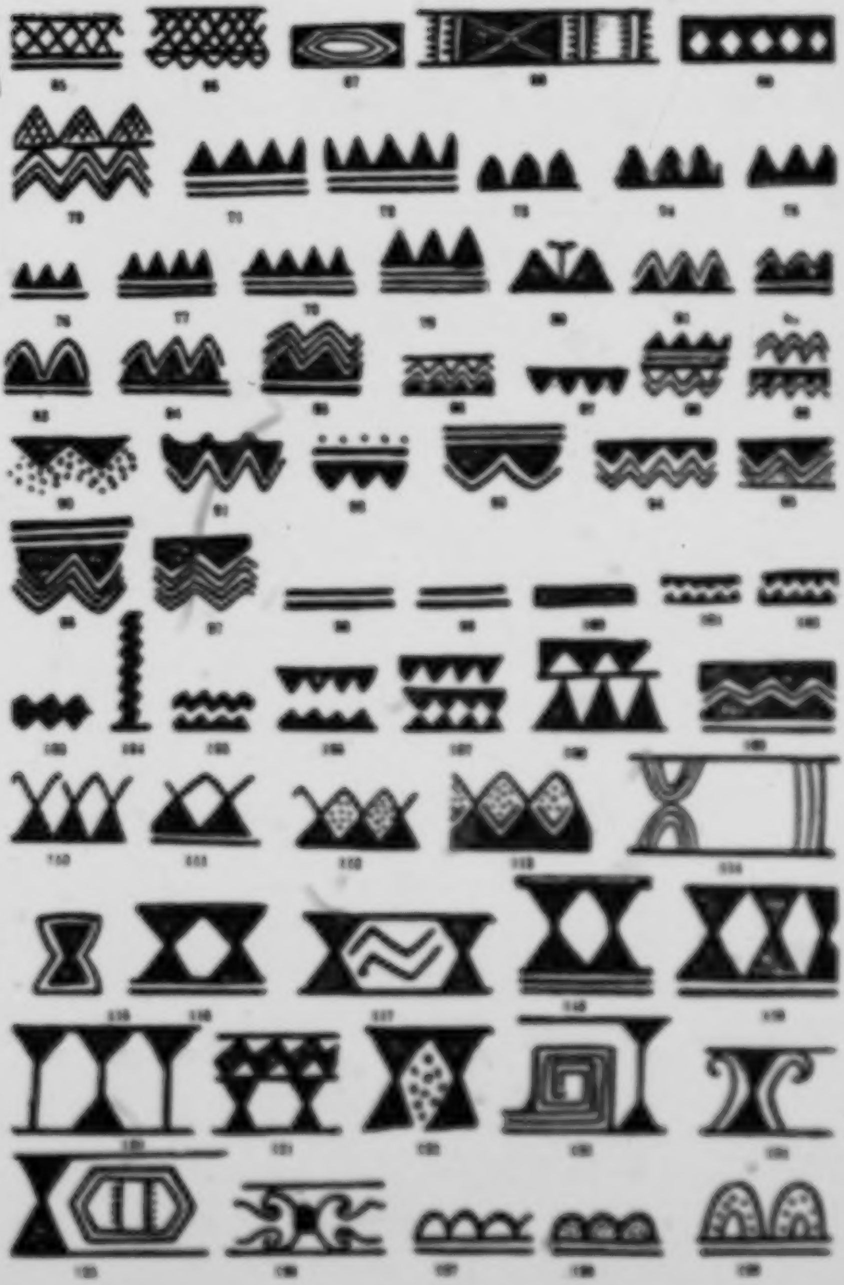
Plate XXXI



Principal decorative motifs of Chiriguano and Chané pottery.

1: Métraux--200 E-5 (1929) 1930 SF10 Chiriguano SF10

Chané SF8

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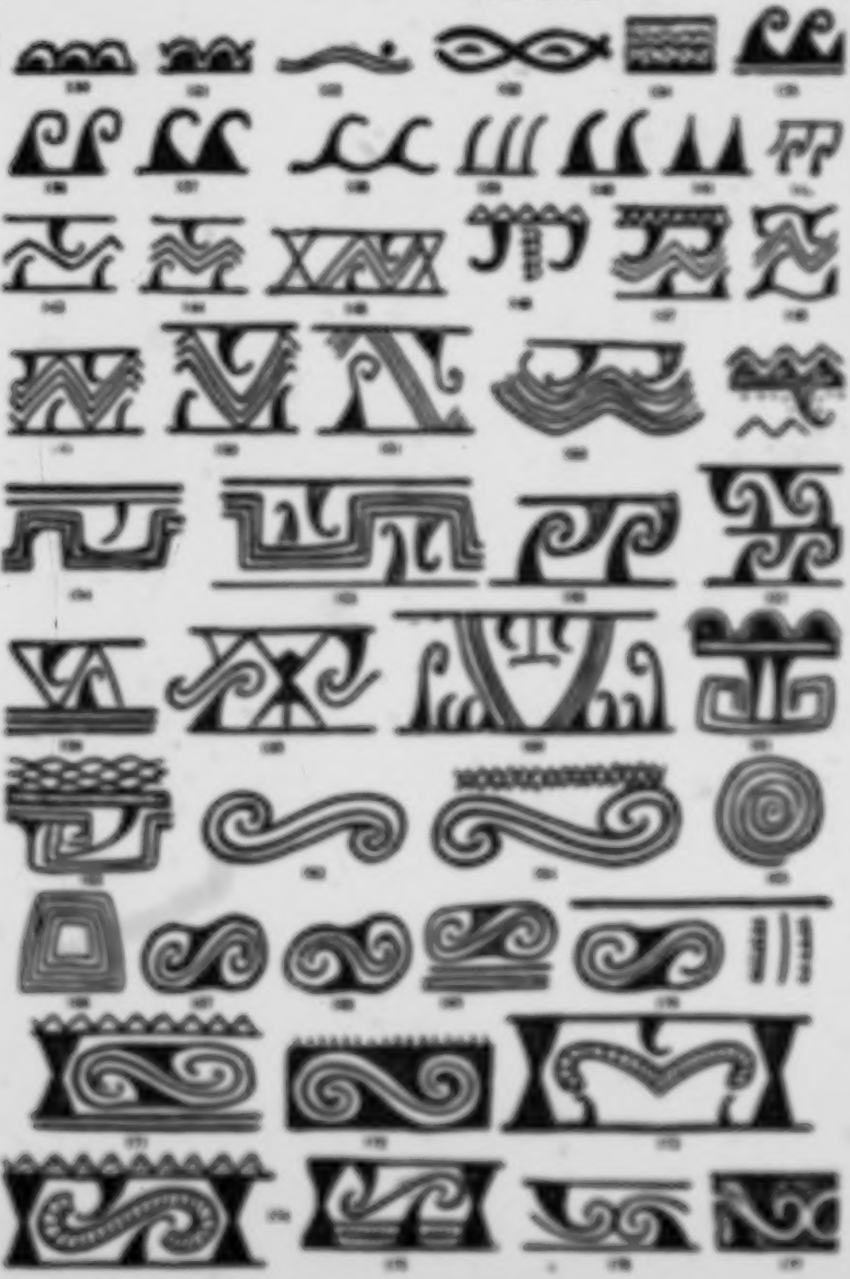
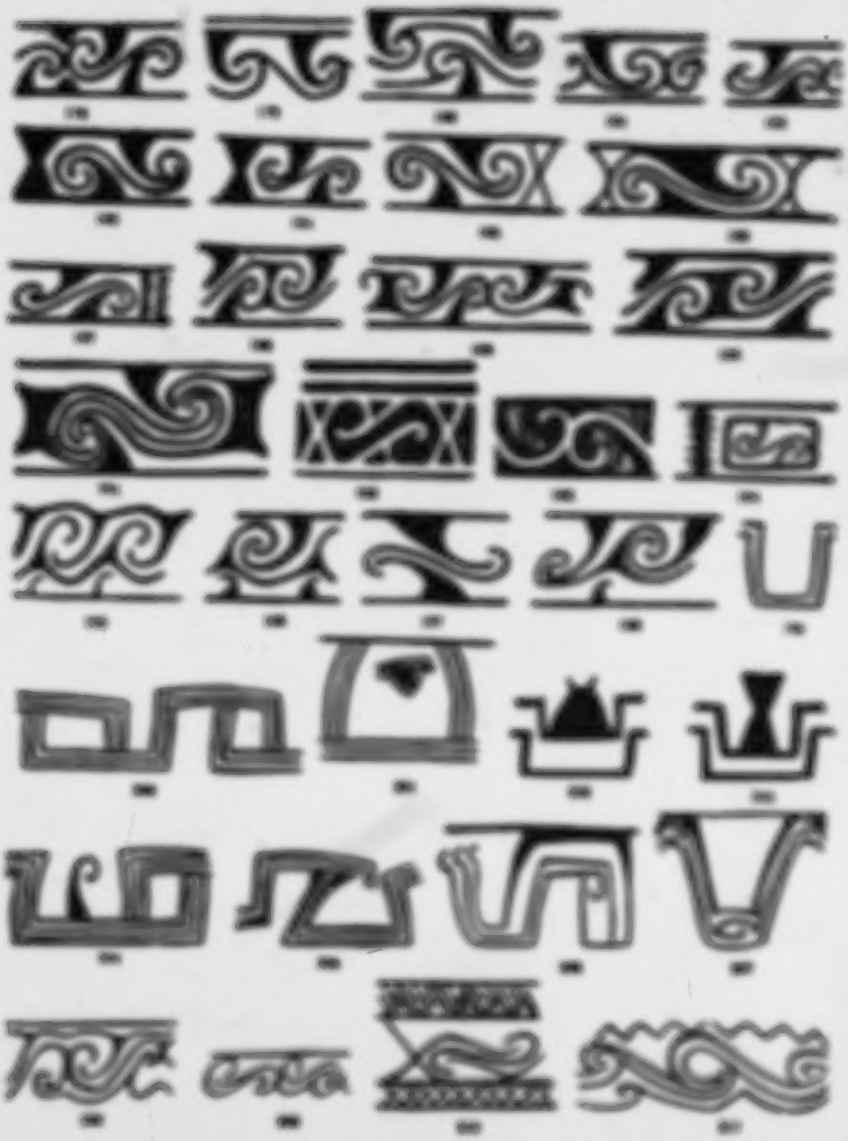
Plate XXXII



Principal decorative motifs of Chiriguano and Chané pottery.

Plate XXXIII

Ce 531



Principal decorative motifs of Chiriguano and Chané pottery.

E: Métraux--787 6-1 (1930) 1931 SF10 Chiriguano SF10
Chane SF8

C
Ce
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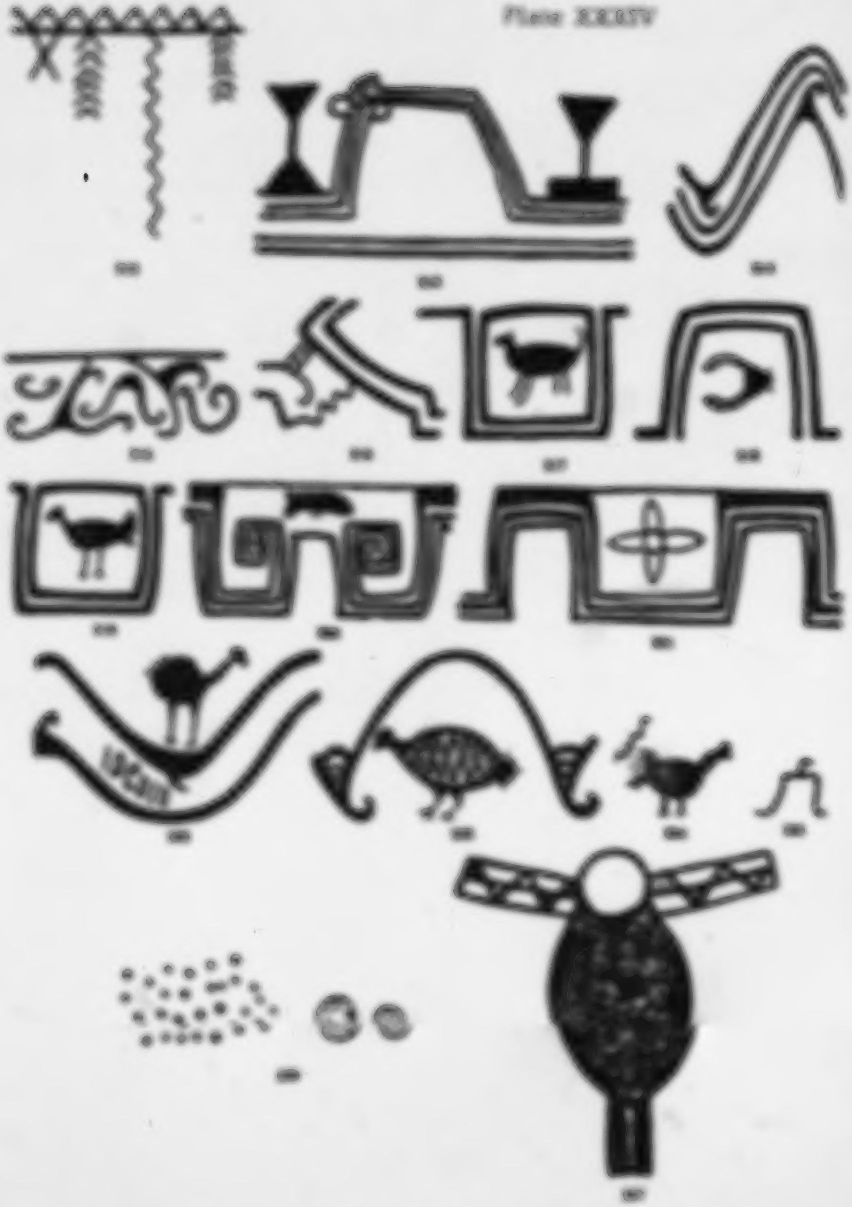
Plate XXXIV



Principal decorative motifs of Chiriguano and Chané pottery

A 531 192 C 531 191

/413 cont./

It is also met on most of the vessels from Tacna and Taltal, belonging to the period known as Chincha-Atacama (Uhle, 4, Plate XIX, Figs. 1 and 2; Plate XX, Figs. 1 and 2; Plate XXI, Fig. 2; Plate XXII, Fig. 4; Plate XXIII, Fig. 1; Plate XXIV, Fig. 2; and Guevara, Vol. I, plate between pp. 42 and 43 and between pp. 48 and 49).

These analogies with Chiriguano pottery become still more striking if one considers the details and arrangement of this motif. On a vessel from Tacna (Uhle, 4, Plate XX, 1) the volute takes off from two lines forming an angle, as on the yambuí of Plate XL, 1, published here. On the vessel from Tacna (Uhle, 4, Plate XXI, Fig. 2) the triangles with a volute face one another, and the inflections of the spiral are accompanied by a parallel line in another color. An anthropomorphic vessel found at Tacna (Uhle, 4, Plate XXIII, Fig. 1) is also decorated with hooked triangles which face each other alternately.

As for the frets of Uhle's Chincha-Atacama vessel (4, Plate XXII, Fig. 4), they are doubtless volutes which the potter's fancy modified.

One can as well consider as a derivation of the voluted triangle the hooks which, on several Tacna and Taltal vessels and on a Calama calabash, form vertical and horizontal rows (Uhle, 4, Plate XX, Fig. 1; Plate XXII, Fig. 2; Plate XXIII, Fig. 3; XXIV, /414/ Fig. 3, etc.; Guevara, Vol. I, plate between pp. 46-47 and 48-49; and Oyarzun, Fig. 11). With the Chiriguano the voluted triangle underwent an analogous process of simplification, but this evolution took place only in very rare cases and on pieces whose decoration was drawn with a certain negligence (Plate XXXII,$^{\frac{1}{A}}$ 138-140).

A 531 192

The textile fabrics from Arica discovered by Skottsberg (Figs. 41-42), which are kept today in the Göteborg Museum, exhibit the voluted triangle, among other motifs. Judging by their style, these specimens undoubtedly belong to Uhle's Chincha-Atacama period.

$\frac{1}{A}$ [See p. 200 -- Analyst]

Atacama SG5
Yunca SE21
Chimu

A
Y /414 cont./

531 According to Uhle (4, p. 38), the volute and the triangle
171 with spiral which combines with its opposite number appear on
172 the cloth of the Chincha and Ica region and also suggest certain motifs of Chimu art.

The voluted triangle is one of the motifs tattooed on the hand of an Ancon mummy with which Montell (2, pp. 148-151) dealt in detail.

Y On a large number of Chimu vessels with stirrup handles,
415 belonging to the "lecythi" category, the decoration consists
531 of a series of voluted triangles.

Y Judging by the plates in Baessler's atlas (Plates I-VI),
531 the spiral is most often combined with a triangle, one of whose
Y sides is in steps or zigzags. Baessler sees in these different
[114] figures stylizations of octopus arms. I do not think so. This
[773] motif, whose distribution is so wide, cannot be derived from the representation of an animal whose role is secondary in Chimu mythology and in which interest is purely local in every case.

A In the coastal zone of the Pacific where Chincha-Atacama
531 influence manifested itself, the triangle with spiral is as fre-
171 quent on pyrographed calabashes as on pottery. This design
172 was pyrographed on calabashes found at Arica by Skottsberg (Göteborgs-museum, No. 19.1.5), in the valley of the Loa River (Montell, 1, Fig. 40, p. 35), and at Calama, where on several specimens the volute was replaced by a fret which prolongs the classic triangle (see Boman, 2, Vol. II, Plates LXXV-LXXVI, Figs. 176-177, and Oyarzun, Figs. 4-9, 15, and 18). The specimens from Calama are remarkable for the variety and boldness of the decoration and are, without any doubt, the most beautiful specimens of the pyrographic art in South America (1).

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1. Boman (2, Vol. II, p. 746) states that certain decorations pyrographed on the calabashes found at Calama, such as, for example, the one composed of couchant S's, are found again on engraved calabashes from

Atacama SG5
Prehistoric Chile SG3
Bolivian Prehistory SF4
Prehistoric Argentina SI3

A 531 171 172 /414 cont./

Arica. One of the latter is reproduced in the work of Stübel and Reiss, which was not available to me (Stübel, A., Reiss, W., Koppel, B., and Uhle, M., Kultur und Industrie südamerikanischer Völker /Culture and Industry of South American Peoples/. Berlin, 1889, Vol. I, Plate 25, Fig. 19).

PC 531 The same design is represented on the bottom of a Chilean puco from Conchali, on the sides of a vessel from Rivadavia, and on an ornithomorphic bowl /415/ from Freirina, Chile (see Latcham, Fig. 47, p. 19; Fig. 53, p. 21; Medina, Fig. 165). If, as I am inclined to believe, the fret or fret element surmounting the triangles with one stepped side derives from the simple triangle with volute, the distribution of this motif would be still wider. In Chile it has been painted: on vessels from Rauten, San Francisco, San Felipe; on an urn from Chellepin; on a puco from Paipote, Tongoy, and Valdivia (Latcham, Fig. 17, p. 11; Fig. 26, p. 12; Fig. 74, p. 32; Fig. 55, p. 22; Fig. 59, p. 26; Medina, Figs. 166 and 171).

BP 531 At Tolomosa in Tarija department in Bolivia, the excavations dug by the Swedish mission produced, among other PA [415] [531] pieces, a dish whose rim bears intertwined voluted triangles painted in black. This specimen is the exact replica of puco of the same shape found at La Paya, which I shall mention further on (Rosen, 2, Fig. 175, p. 112).

P.A. 531 The ancient inhabitants of the Puna de Jujuy liked to pyrograph on /Fig. 79 appears here/ their calabashes borders composed of voluted triangles arranged in two rows and facing one another alternately (Ambrosetti, 4, Figs. 65-67, pp. 66-67; Fig. 68, p. 68, Vol. LIV). At Morohuasi, Rosen (2, Fig. 117, p. 71) discovered a receptacle of the same kind with analogous ornamentation.

The voluted triangle is a classical element, so to speak, in the decoration of the vessels found at the Pucará de Tilcara (Debenedetti, 2, p. 88, note 1. See also Bregante, Fig. 177, p. 170; Fig. 223, p. 189; Fig. 229, p. 191; Fig. 230, p. 191; Fig. 242, p. 198).

PA 531 114

/415 cont./

On the other hand, the excavations carried out on the Isla de Tilcara have produced only a few specimens of pottery whose ornamentation was curvilinear. Debenedetti (2, p. 88) considers the latter, for reasons which I cannot accept, as foreign to the locality. Nevertheless, he has reproduced in his book the decoration of two dishes which is made up of facing triangles with volutes (Debenedetti, 2, Figs. 53 and 54, pp. 88-89) (Fig. 79); and he notes the same design on two other dishes which he does not reproduce. In the same publication (Debenedetti, 2, Fig. 113, p. 165; Fig. 114, p. 166; Fig. 115, p. 166) are represented three vessels similar to the Chiriguano yapepo and also decorated with hooked triangles.

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C 415 171 531

/416/ The most interesting piece in this respect is the

P.A 415 531

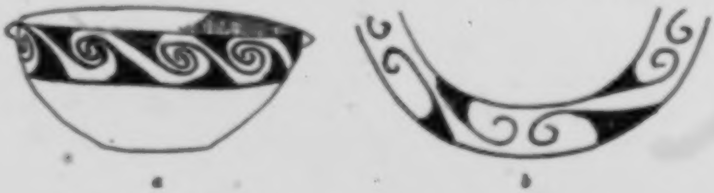

Fig. 79. a, bowl from the Isla de Tilcara, whose rim is decorated with facing voluted triangles; b, border of a dish decorated with voluted triangles (Isla Tilcara) (from Debenedetti).

C 415 171 531

yuro of Figure 70 b, reproduced from a drawing given by Debenedetti (2, Fig. 124, p. 175). We have already seen that its form is identical with that of a Chiriguano ĩru I bought on the upper Pilcomayo. The same is true for the general elements of its decoration.

PA 531

The voluted triangle is found on three other pieces from the Isla de Tilcara (Debenedetti, 2, Fig. 160, p. 217; Figs. 161 and 163, p. 217), which Debenedetti (2, p. 218) classes among the pottery imported to the Isla de Tilcara and utilized by curacas /chiefs/. Our yambuí from the upper Pilcomayo, which from the artistic point of view are very superior to the specimens described by Debenedetti, have often been bought

C 415 531 171 126

Prehistoric Argentina SI3

C /416 cont./
531 by me in humble cabins whose owners were certainly not
415 curacas, but poor devils who had the luck to have a mother
121 or grandmother who was an expert potter. If the criterion of
[126] Mr. Debenedetti were admissible, the crude pottery and the
[114] fancy vessels which can be bought in every Chané or
C Chiriguano village would be products of two different civiliza-
415 tions. In reality the fancy pottery is used on feast days for
drinking chicha; and the other, more humble in appearance,
is adapted to daily needs.

P.A
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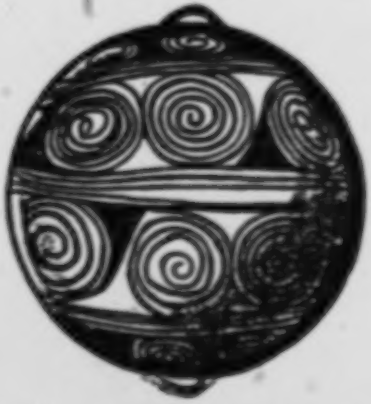

Fig. 80. Dish from Tilcara and decorated with red voluted triangles on a white background. (1/6 nat. size ±.)

P.A
531 Besides, the voluted triangle is more frequent on the
[114] Isla de Tilcara than Debenedetti wishes us to think. In addition to the examples cited, seven others must be added (Debenedetti, 2, Fig. 24, p. 59; Fig. 30, p. 63; Fig. 40, p. 70; Fig. 48, p. 80; Fig. 165, p. 219; Fig. 165, pp. 219-220). A vessel from Alfarcito in the same Quebrada bears a triangle with volute on the inside rim of the neck (Debenedetti, 4, Fig. 15, p. 29).

Prehistoric Argentina SI 3
Atacama 565
Diaguita 566

/416 cont./

PA 531

Several vessels from Yavi to the north of Jujuy also have as the principal decorative motif the triangle with volute (Bregante, Fig. 71, p. 82; Fig. 72, p. 83; Fig. 226, p. 190).

A large number of vessels found at La Paya (Calchaqui Valley, Salta province) bear series of triangles with spirals which combine and face one another in the style of the upper Pilcomayo. Pottery of this region exhibiting this motif has been illustrated by Ambrosetti (6, Figs. 36 and 37, p. 59; Figs. 38-39, p. 60; Figs. 41-43, pp. 61-62; Figs. 50-52, pp. 70-73; Fig. 128, p. 287; Fig. 131, p. 291; Fig. 138, p. 297; Figs. 173-175, pp. 346 and 349-350; /417/ Fig. 218, p. 405) and by Boman (2, Vol. I, Plate X, Fig. 22; Plate XI, Figs. 23-24; Plate XII, Fig. 25; Plate XIII, Fig. b).

PA A D 531 171

After describing these pieces, Boman (2, Vol. I, p. 238) adds rightly that "pottery of this style occupies first place at La Paya, which is curious because the decoration does not belong at all to the Diaguite region. Actually, La Paya, on the border of the Pulares, an Atacama tribe, has the characteristics of the culture of the Diaguite /Diaguita/ and Atacama Indians (Boman, 3, p. 540, and 4, p. 2). Doubtless the pieces we have listed above must be attributed to the latter or to their influence.

PA 531 171

The distribution of the voluted triangle in northwestern Argentina has been studied very briefly by Odilia Bregante (pp. 189-193) /there are no quotation marks to indicate the end of the following quotation/: "The triangle with spiral is very common in northwestern Argentina from the most northerly regions up to the Calchaqui valley. In the north it is isolated; in the south it is combined with motifs which express a high degree of evolution. Sometimes it appears in bands of consecutive triangles whose appendages are separated. However, more frequently these appendages are found interlaced two by two. In localities as distant as Yavi to the north of Jujuy and Amaicha in Tucuman province we can state that the motif is always the same, but that in each place it acquires characteristics peculiar to the region.

Prehistoric Argentina SI3
Diaguita SG6
Calchagui

PA /417 cont./

531 On some pieces the voluted triangle is associated with the
171 triangle with rectilinear prolongation. In certain regions of the north the voluted triangle has been found with a singular complement: a series of more or less parallel lines which take off from the volute of the triangle. This triangle with spiral and lines appears, outside our territory, on a specimen from Quillagua (Chile). No example of this curious decoration has ever been found in the numerous excavations carried out in the zone which extends to the south of Jujuy. No doubt it is peculiar to the cultures of the north.

D
531 The triangle with spiral reaches its highest degree of evolution and elegance when it has a stepped pattern on one of its sides. This figure predominates in the Calchaqui zone. It is seen on urns and puco, where it constitutes one of the most interesting geometric motifs. It enters into the formation of admirable borders decorating the dishes of the Calchaqui valleys with extreme frequency.

PA At Tinti in the Salta country, in a zone where almost no
531 remains of the Calchaqui culture exist, and even farther away at
171 Tastil north of La Poma, Boman found pottery decorated exclusively with triangles with volutes and stepped, whose appendages interlace two by two.

The distribution of the triangle with volute is the following: Jujuy, Salta, Tucuman, and Catamarca.

/418/ "In the province of Salta it has been found at La Paya, Kipon, Angastace, and Luracatao.

"At Tucuman it appears on pottery excavated in Amaicha and Tafí. Specimens with this decoration come from different points of Catamarca province: Fuerte Quemado, Molino del Puesto, Pabellón, Andalhuala, Santa María, Loma Rica, Gusayaco, La Toma, Costa de los Reyes, La Cienega, and Belen."

This list must be lengthened. Other points in Argentine territory have furnished vessels or dishes bearing this famous motif. Thus, in the archeological material from Tastil, Quebrada del Toro, published by Boman (2, Vol. I, Plate XXXI, Fig. 83, and Plate XXXII, Fig. 84), there is a calabash cut in half and decorated with pyrographed spirals

PA /418 cont./
531 taking off from a blackened triangle. A painted vessel from
171 the same locality has the same motif on its belly, but there
the spiral has changed into a fret.

So that the distribution of the triangle with spiral may be complete, we must add: Caspinchango in Catamarca province (Debenedetti, 5, Figs. 10-12, pp. 24-25, and Fig. 14, p. 27); San Blas de los Sauces y Los Mazas in La Rioja province (Boman, 5, Plate VI, Fig. E; Plate VII, Fig. F; Plate XX, Figs. a and b, and Fig. 11, p. 65); Antofogasta de la Sierra (Ambrosetti, 5, Plate I, Figs. 31 and 32); Chañar Yaco (Catamarca) (Lafone Quevedo, 1, Fig. 47, p. 39); and finally Barreal in San Juan province (Kühn, p. 21).

D The recent excavations of Messrs. Emile and Duncan
P.A Wagner in the province of Santiago del Estero permitted them
531 to discover the remains of a population whose culture was
171 closely related to that of the valleys of the Diaguite region.
It is undoubtedly a matter of a tribe of the Kakan language, established on the plain crossed by the Salado River. There too we find our triangle with volute, judging by the plates on which Mr. Duncan Warner has tried to reconstitute the pieces of pottery whose fragments he found. Here again we note the transition of the volute to the fret.

D Over and above these additions, some observations must
P.A be made concerning the passage from Odilia Bregante. The
531 triangle whose apex is prolonged in a curved or straight line
[178] can be considered as a degeneration of the voluted triangle,
as has already been said above (see Lafone Quevedo, 2, Plate IX, b).

D I have called attention several times to the transition
531 of the volute into fretwork or element of it. This progressive
178 mutation of one motif into another took place in Diaguite
S [531] country exactly as among the Chiriguano. Urns of the Santa
[178] Maria type exhibit, among other common decorations, a
triangle, with steps or not, which terminates in fretwork. Now on several specimens this fret element is a volute or a /Plates XXXV-XLVI appear here/ /419/ more or less closed

Plate XXXV

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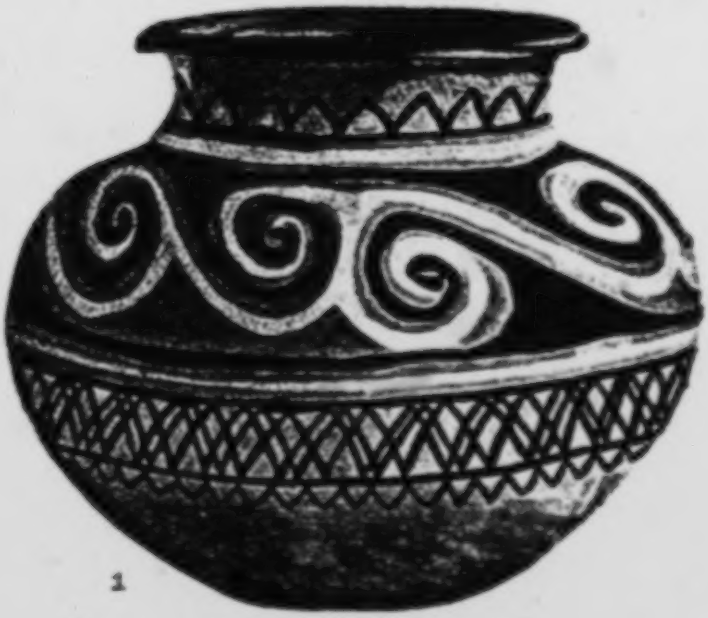

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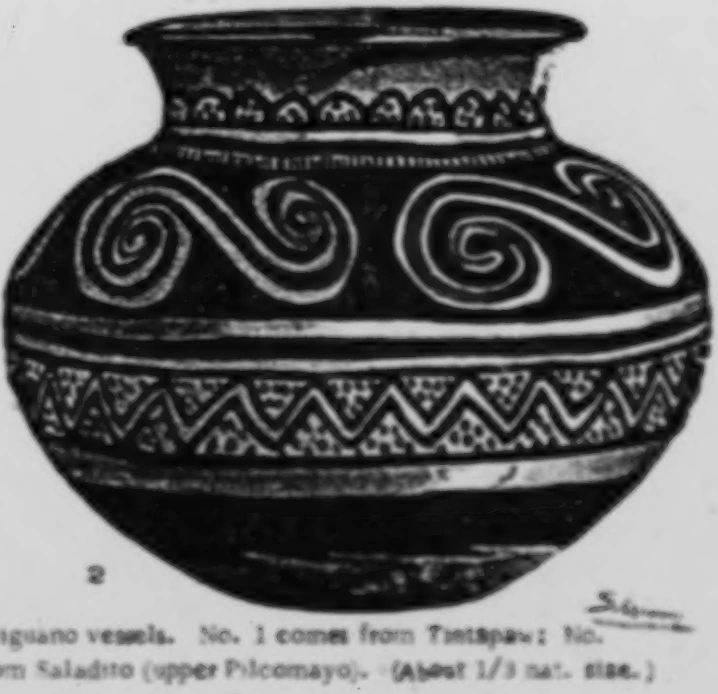
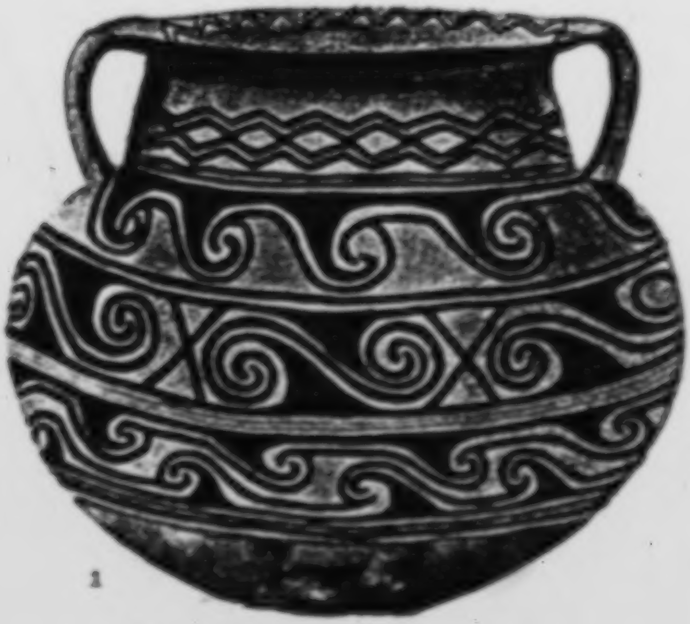


2

Chiriguano vessels. No. 1 comes from Tentapau; No. 2 from Saladito (upper Pilcomayo). (About 1/3 nat. size.)

Plate XXXVI



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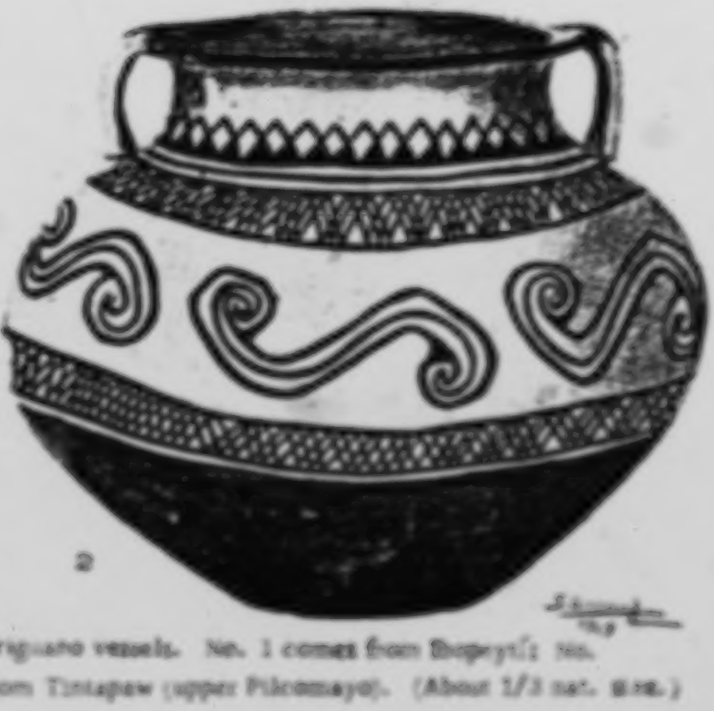

2

Chiriguano vessels. No. 1 comes from Ibopeytí; No. 2 from Tintapew (upper Pilcomayo). (About 1/3 nat. size.)

Plate XXXVII

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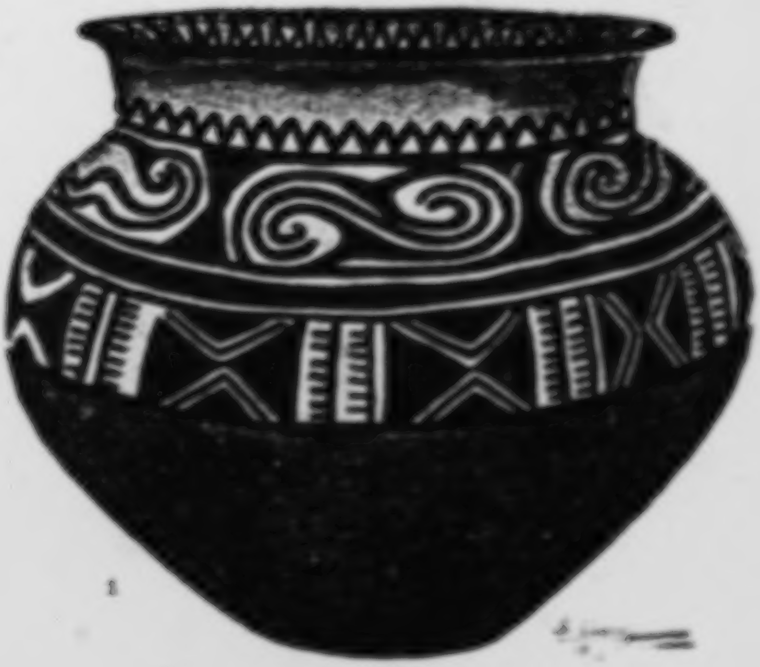
531



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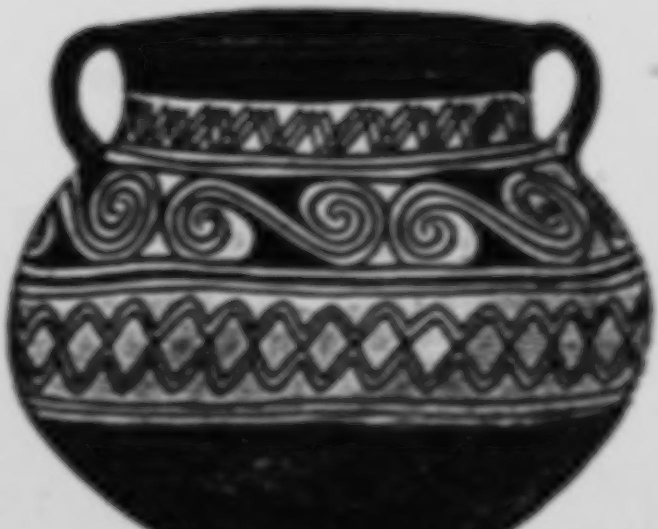

2

Chiriguano vessels. No. 1 comes from the Igüembé Valley; No. 2 from Saladillo (upper Pilcomayo). (About 1/3 nat. size.)

1: Métraux--214 E-5 (1929) 1930 SF10 Chiriguano SF10

Chane SF8

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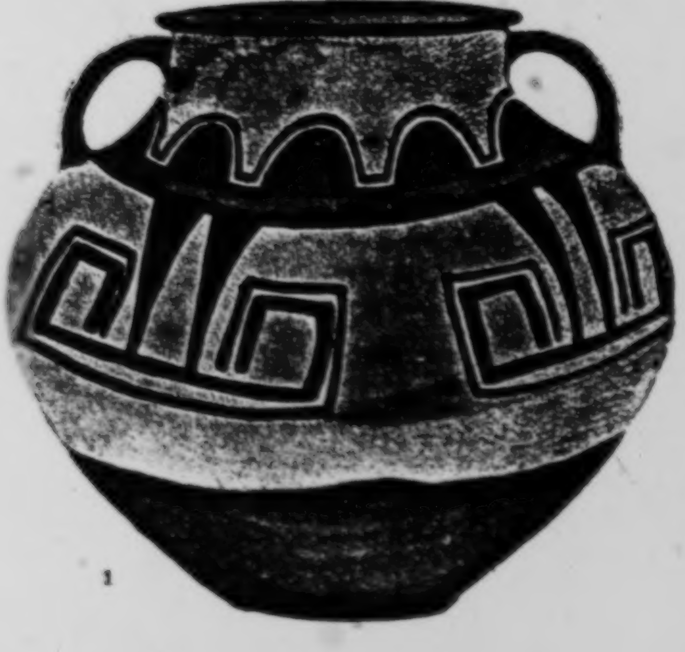
Plate XXXVIII



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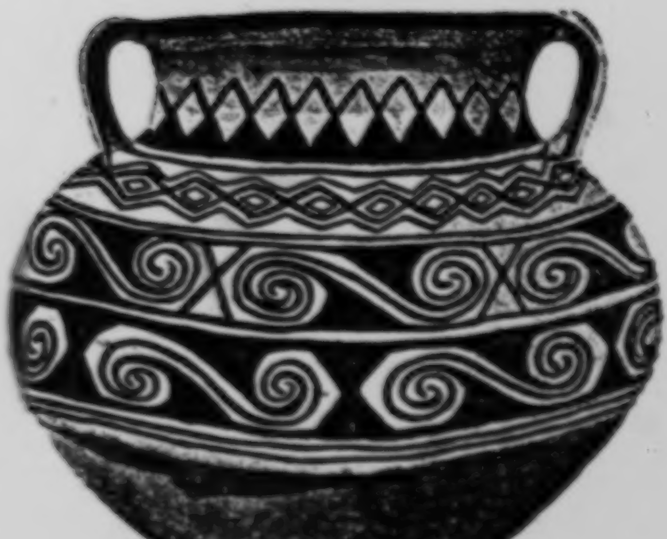

2

Chané and Chiriguano vessels. No. 1 comes from the Aguaray (Salta Chaco); No. 2 from Ibopeytí (upper Pilcomayo). (About 1/3 nat. size.)

1: Métraux--215 E-5 (1929) 1930 SF10 Chiriguano SF10
Plate XXXIX

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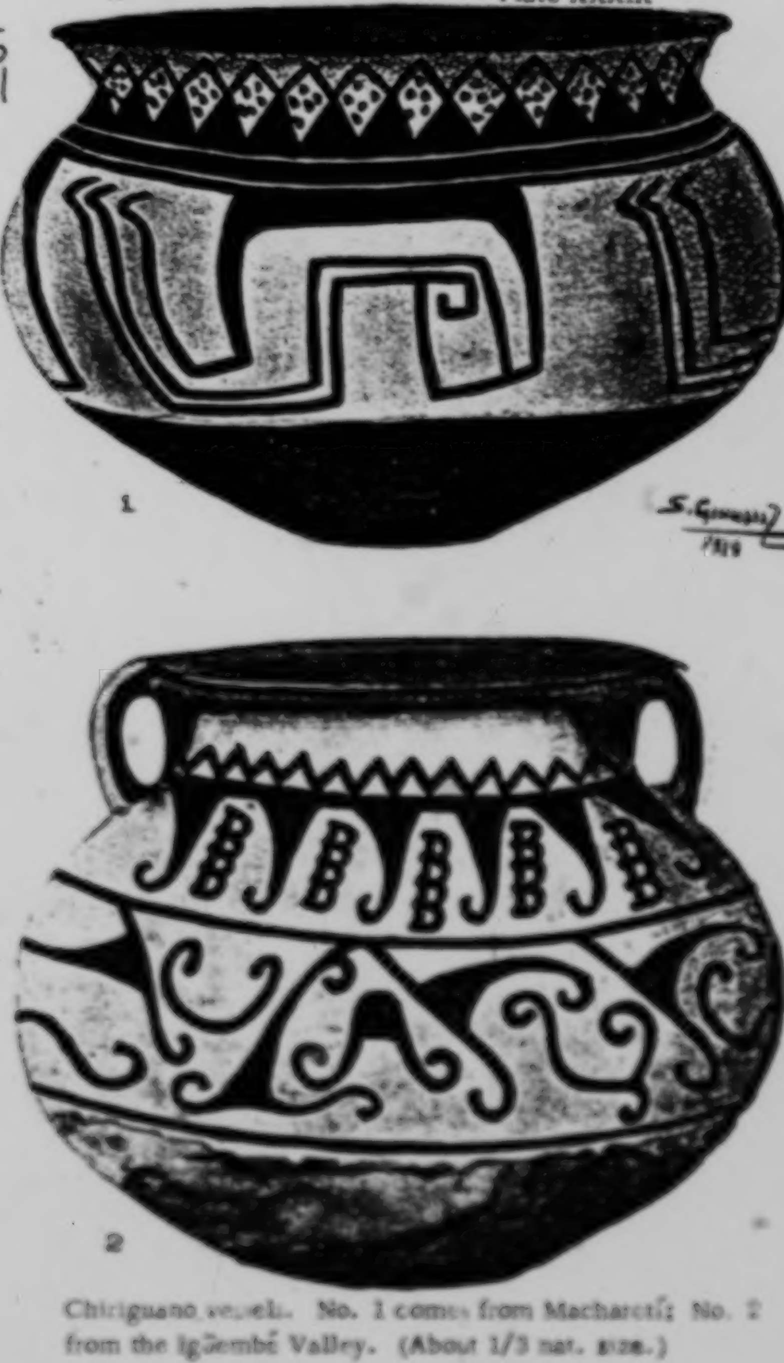
531


1
S. Gonzalez
1929
2

Chiriguano vessels. No. 1 comes from Macharetí; No. 2 from the Igüembé Valley. (About 1/3 nat. size.)

1: Métraux--216 E-5 (1929) 1930 SF10 Chiriguano SF10

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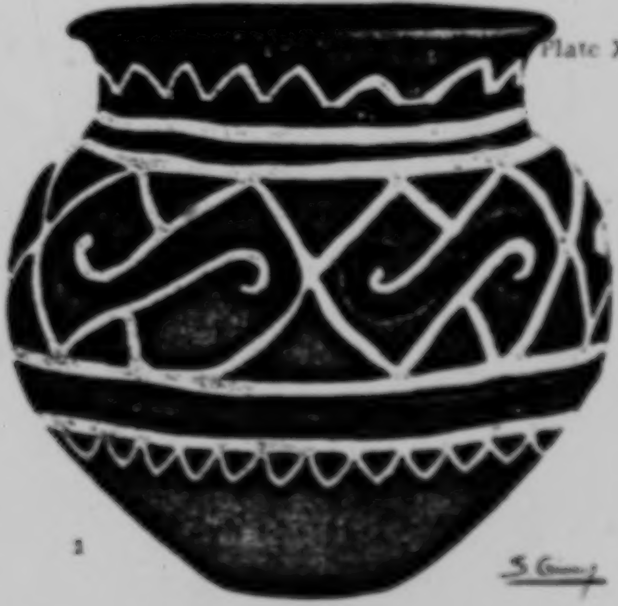
Plate XL



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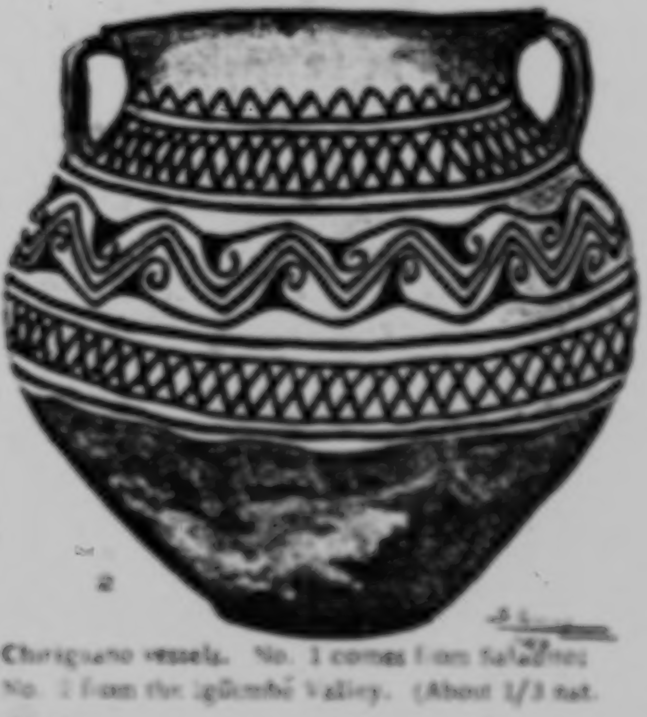

2

Chiriguano vessels. No. 1 comes from Saladillo; No. 2 from the Igüembé Valley. (About 1/3 nat. size.)

1 Métraux -- 217 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate XII

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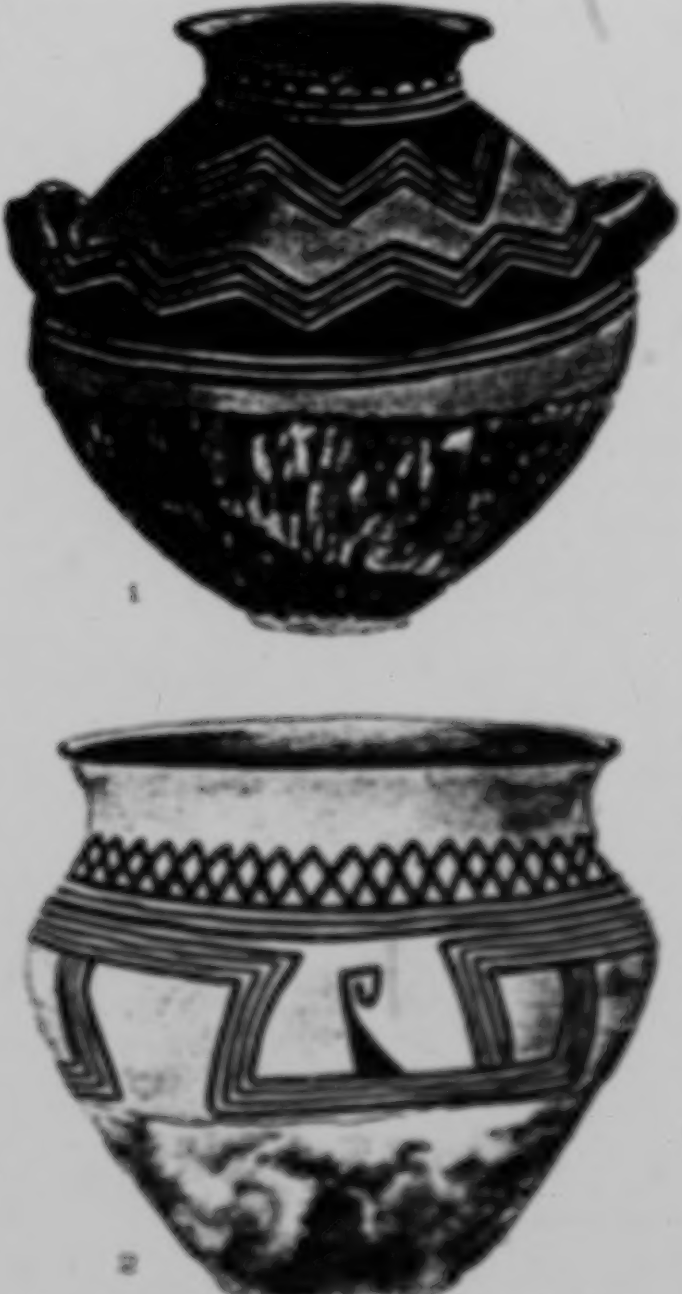

Chiriguano vessels. Nos. 1 and 2 come from Ibo. About 1/3 nat. size.)

I: Métraux 219 Q-S (1929) 1930 SP10 Chiriguano SP10

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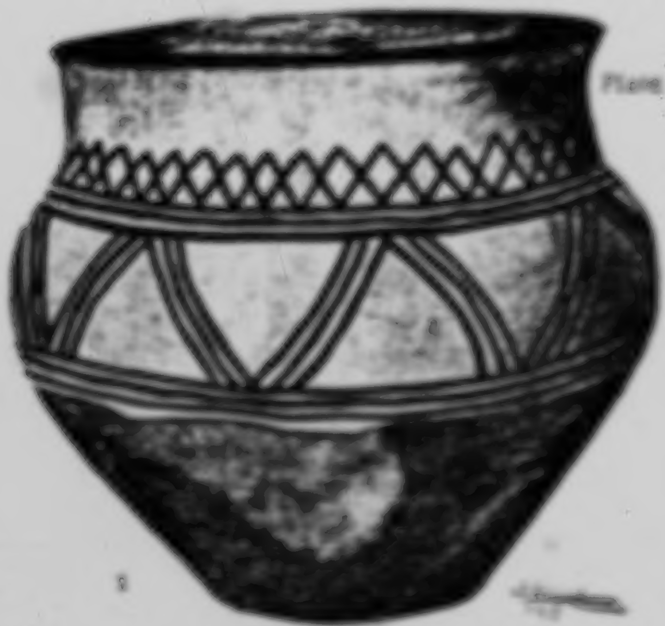
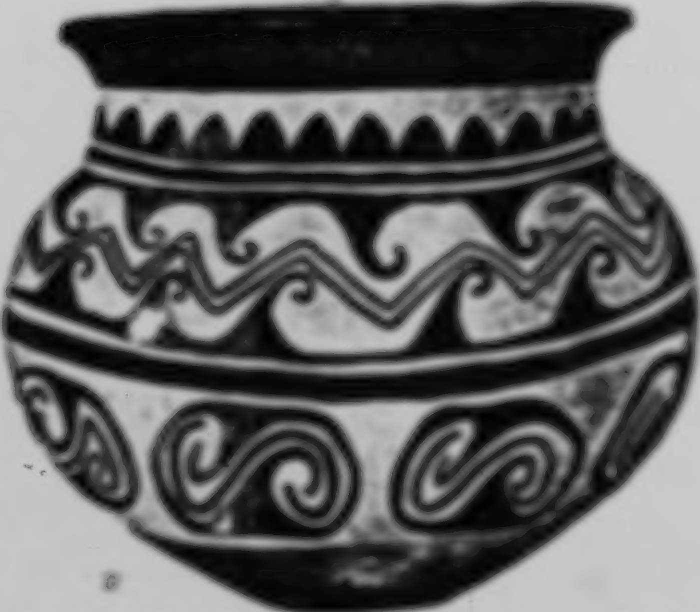
Plate XLII


1


2

Chiriguano vessels. No. 1 [illegible] from [illegible]; No. 2 from Saladillo (upper Pilcomayo). [About 1/3 nat. size.]

Plate XIII

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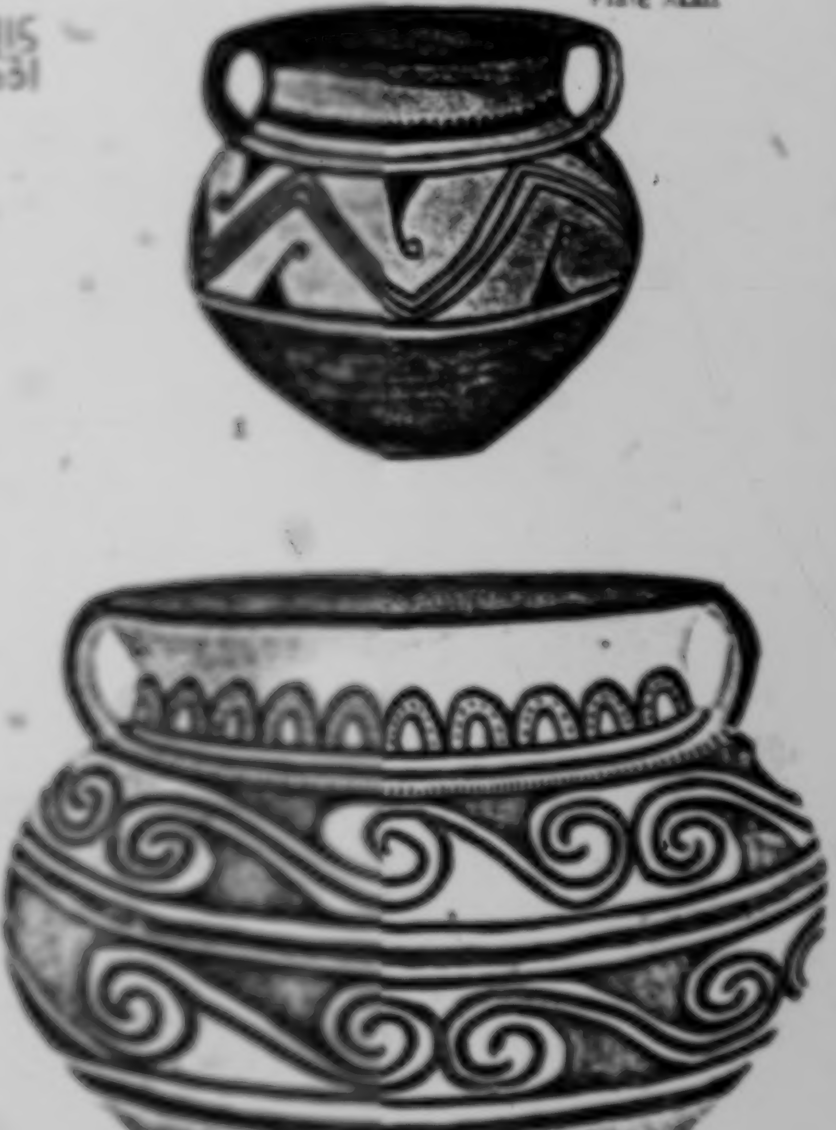

Chiriguano vessels. No. 1 [illegible] from Machareti; No. 2 from [illegible] (upper Pilcomayo). (About 1/3 nat. size.)

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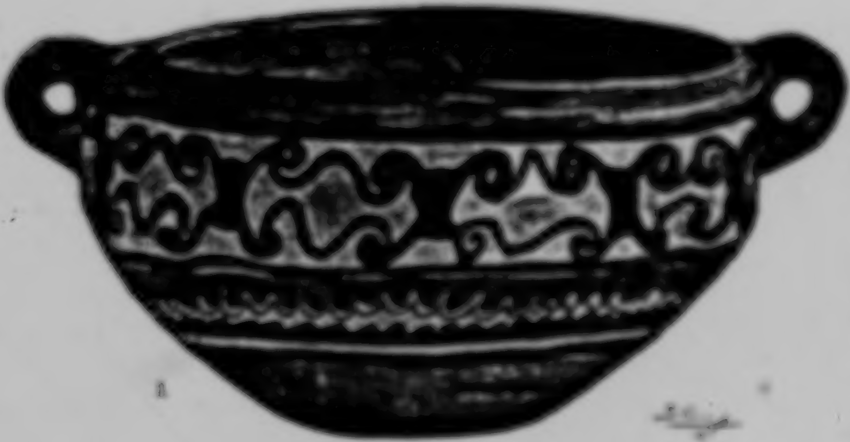
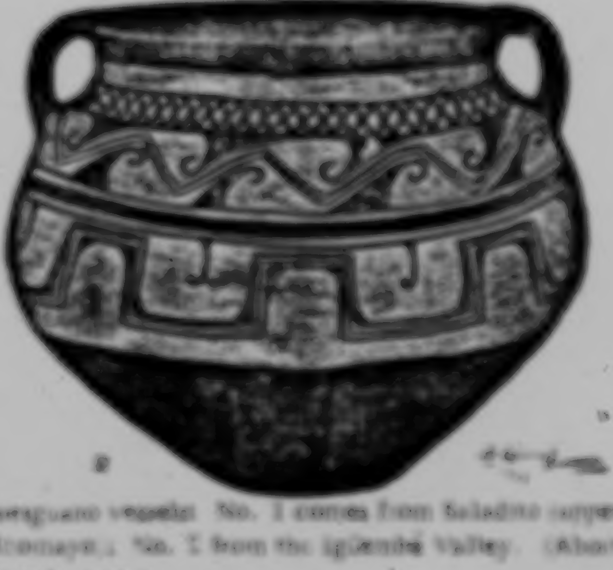
Plate XLIV





Chiriguano vessels: No. 1 comes from Saladito (upper Pilcomayo); No. 2 from the Igüembé Valley. (About 1/3 nat. size.)

[illegible] Métraux—331 E-5 (1930:[illegible]) [illegible] Chiriguano [illegible]

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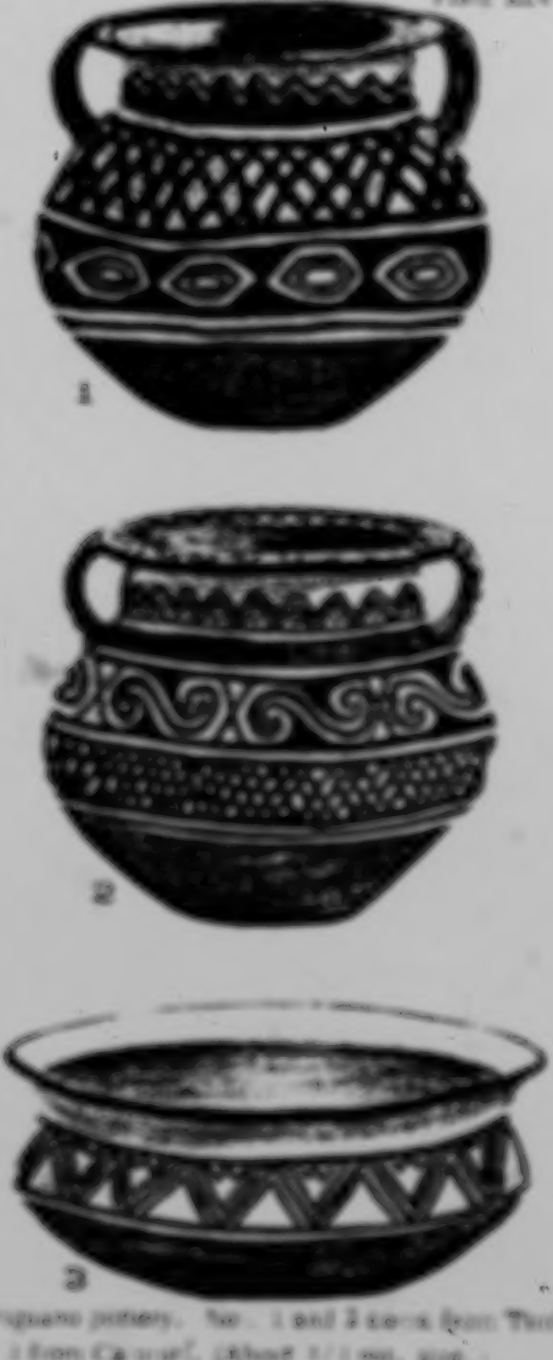
Plate XLV



Chiriguano pottery. Nos. 1 and 2 come from [illegible]; No. 3 from [illegible]. (About 1/3 nat. size.)

Plate XLVI

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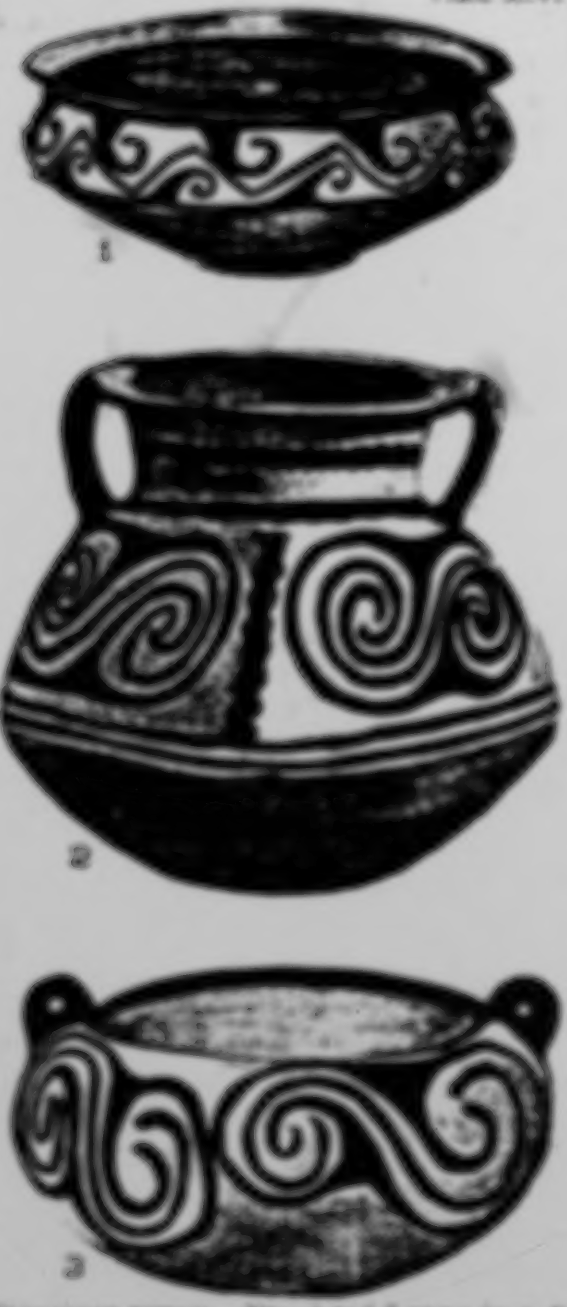

Chiriquí pottery. Nos. 1 and 3 come from [illegible]; No. 2 from [illegible] (upper [illegible]). (About 1 : 3 nat. size.)

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/413 cont./
teeth (1). I strongly doubt that the triangle with volute and the

1. See, for example, Bruch (2, Fig. 37, p. 57; Fig. 66, p. 71; Fig. 70, p. 74; Fig. 85, p. 85; Fig. 90, p. 89; Fig. 130, p. 132) and Lafone Quevedo (2, Fig. 65, p. 106).

triangle with feet have a separate origin. The second doubtless derives from the first.

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At Tastil on the Salta plain the motif Odilia Bregante speaks of is a triangle one of whose sides is stepped and which terminates in a foot which in turn interlaces with the one taking off from the following triangle (see Boman, 3, Plate XIV, Fig. 3). I cannot understand what arguments Odilia Bregante relies on in order to assert that no vestige of Diaguite culture exists in this place. The contrary seems to be true.

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To sum up, the triangle with volute has a nearly uninterrupted distribution from the north coast of Peru to San Juan province in Argentina, and as far as central Chile. To the east it extends as far as the Pilcomayo and the Quebrada de Humahuaca.

The importance of this decoration increases in proportion as one moves from south to north. In Calchaqui country it is of secondary importance and constitutes an accessory motif; at La Paya it gains in preponderance and this asserts itself in the Quebrada de Humahuaca and on the Pacific Coast. In Chiriguano territory on the upper Pilcomayo it triumphs.

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By itself this motif would constitute a meager proof of the existence of related cultures over the whole extent of this geographical area; but combined with other elements it acquires a very special significance.

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The triangle with volute seems to have developed independently in the Guianas. At least I doubt very much that its occurrence in that region is due to a western influence. The motif adorns manioc graters coming from the Patamona tribe (Nordenskiöld, 14, Fig. 19 c, p. 53) and several Wapiĝana /Wapishana/ and Taulipang calabashes (Koch-Grünberg, 3, Vol. III, Plate XIX, Figs. 1-7).

Diaguita SG6
Peruvian Prehistory SE4
Bolivian Prehistory SF4
Prehistoric Chile SG3
Prehistoric Argentina SI3

C /419 cont./

531 191 The S-shaped double volute (Plates XXXII-XXXIII,[a] 163-164, 167-197). I have already had occasion to insist on the fact that the S-shaped double volute was a motif closely associated with the voluted triangle. In certain cases, and, moreover, rare ones, this decorative element appears detached (see Plate XXVI, 2).[b]

PP [531] The double volute has been painted on several vessels from Tacna (Uhle, 4, Plate XXIII, Fig. 1; Plate XXIV, Figs. 2 and 3; and Guevara, plate between pp. 46-47). There it is once even framed by a line which follows its contour exactly as on some Chiriguano vessels (Plate XXXII, 162-163).

PB 531 On vessels found at Calama and doubtless coming from Cagua (Yura, Porco province, Bolivia) and even in the region of Cagua /420/ (Créqui de Monfort, Plate VII, Fig. 8, and Plate VIII, Fig. 11) an S-shaped decoration is seen which could be brought nearer to our double volute if its style were different. The ends of the curve are slightly pointed, and a dot is inscribed in each hook.

PC 531 Chilean potters have sometimes made use of the double volute to decorate their vessels, but a limited use (Latcham, Fig. 38, p. 16; Fig. 58, p. 25; Fig. 59, p. 26).

PC [324] This motif is also carved in a block /Fig. 81 appears here/ of stone from the Chilean province of Antofagasta, between Santa Fe del Toro and Quillagua (Plagemann, Plate III).

PA 531 In the Quebrada de Humahuaca the double volute embellishes the outside surface of the yuro from the Isla de Tilcara reproduced by Debenedetti (2, Fig. 126, p. 178).

At La Paya the motif is represented on the bottom of two ornithomorphic puco (Ambrosetti, 6, Fig. 131, and Boman, 2, Vol. I, Plate XV, Fig. 29).

D 531 [415] [764] A design in the shape of an S, but made up of a more or less wide band adorns the base or the belly of a large number of funerary urns of the Diaguite region and the bowls which closed them. This decoration /Plates XLVII-LIV appear here/ /on pp. 226-235/ /421/ is not to be confused with the one which has occupied us up to now because it is nothing but a

[a] [See pp 200-201--Analyst]

[b] [See p. 179-- Analyst]

/421 cont./

D
531 very exaggerated stylization of the famous snake with a bipartite head so characteristic of the art of this region. However, a puco

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531 from Molino del Puesto, Catamarca province, exhibits a border, painted in black on a red background, which is composed of triangles with volutes and couchant S's (Bruch, 2, Fig. 43 a, p. 56).

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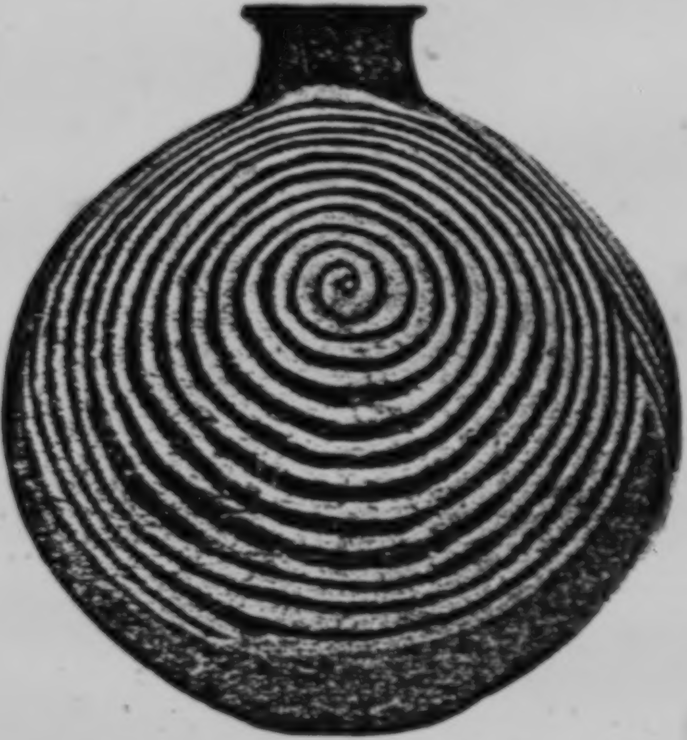
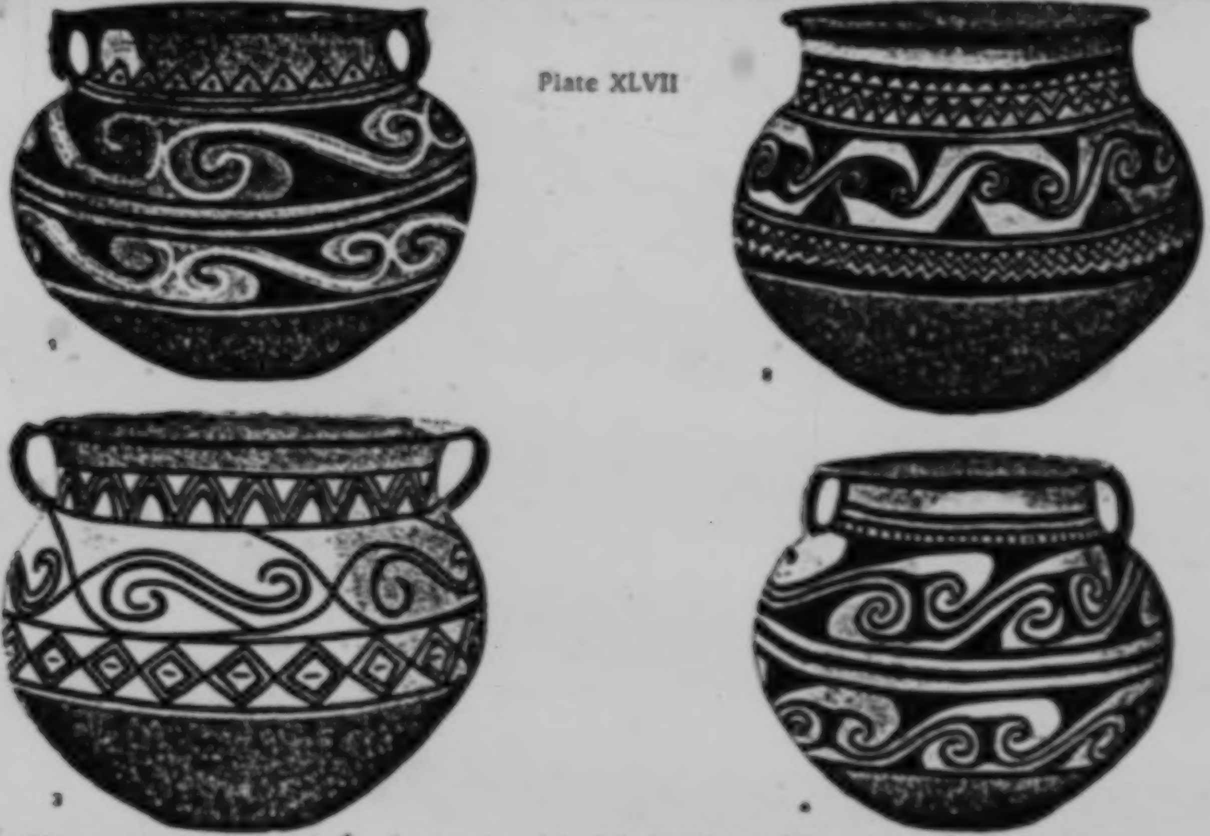


Fig. 81. Large painted îru. Prov.: Saladito (upper Pilcomayo). Colors: white on red. (About 1/4 nat. size.)

C
531 Spirals (Plate XXXII, 165, and Fig. 81). The decoration of certain vessels from the upper Pilcomayo and the Santa Rosa mission (Nordenskiöld, 14, Fig. 70, p. 58) consists of a large spiral making many turns and covering almost the whole exterior surface of the receptacle. Just as in certain cases the volute was transformed into fretwork, this spiral gave birth to the motif seen on the vessel of Plate LV, 3,[1] which is composed of a series of concentric rectangles.

[1] [See p. 237--Analyst]

Plate XLVII



Chiriguano vessels (yambuí). Prov.: 1 and 4, Saladito (upper Pilcomayo); 2 and 3, Tintapaw (upper Pilcomayo). Colors: 1, black and white motifs on red background; 2-4, red and black motifs on white background. (Nos. 1, 3, and 4 = 1/4; 2 = 1/2 ~~nat. size~~ [illegible] .)

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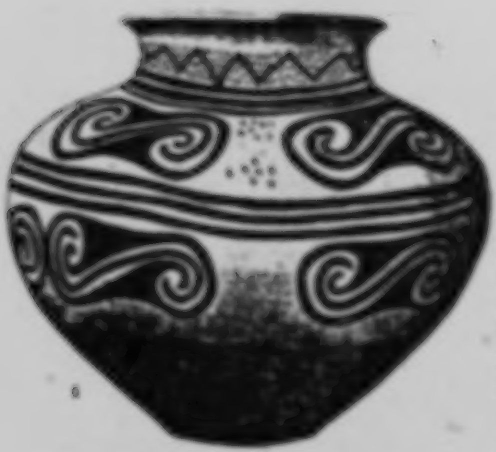
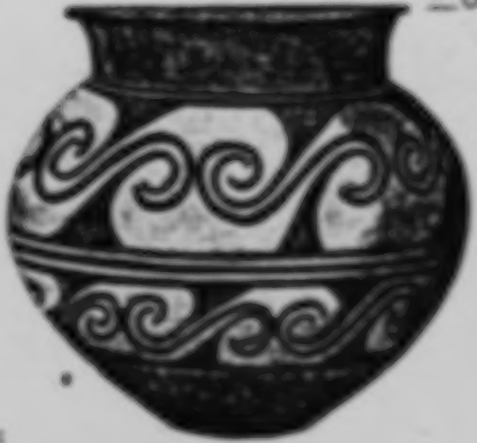
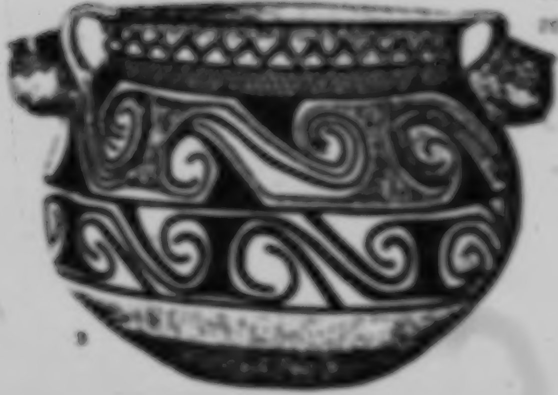
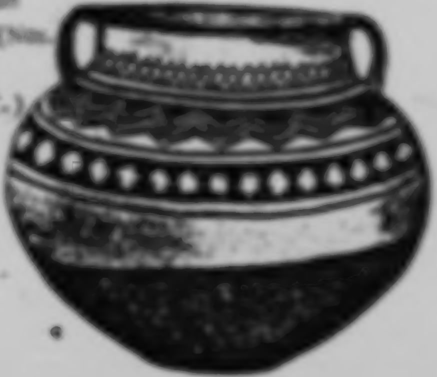
Plate XLVIII









Chiriguano vessels (*yambui*). Prov.: 1 and 2. Saladito (upper Pilcomayo); 3. Ibopeytí; 4. Tintapaw (upper Pilcomayo). Colors: red and black motifs on white background. (Nos. 1, 2, and 4 = 1/5; 3 = 1/4 nat. size ±.)

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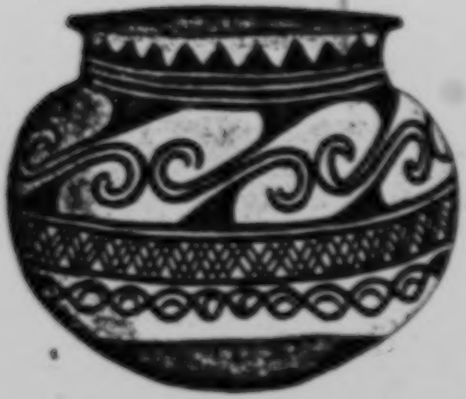
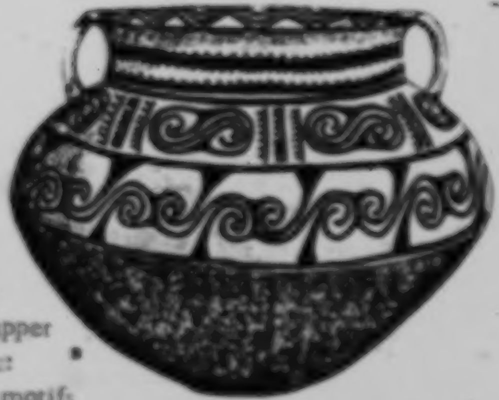
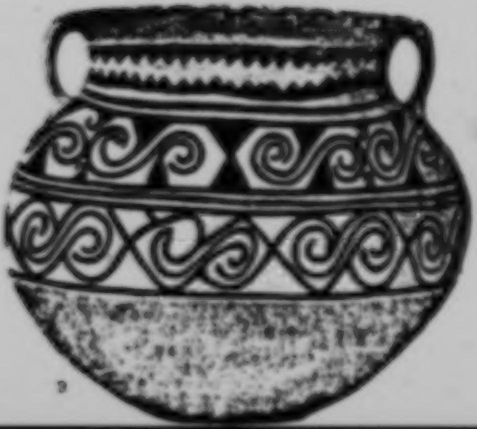
1: Métraux--228 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate XLIX





Chiriguano vessels (yambuí). Prov.: 1 and 4. Saladito (upper Pilcomayo); 2 and 3. Yumbía (upper Pilcomayo). Colors: 1-3, red and black motifs on creamy-white background; 4, white design on reddish background. (Nos. 1, 2, and 4 = 1/6; 3 = 1/5 nat. size ± .)



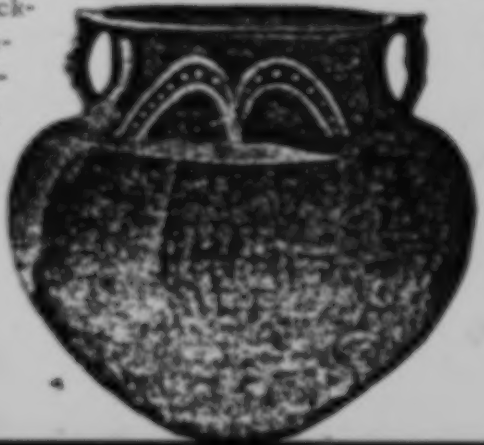


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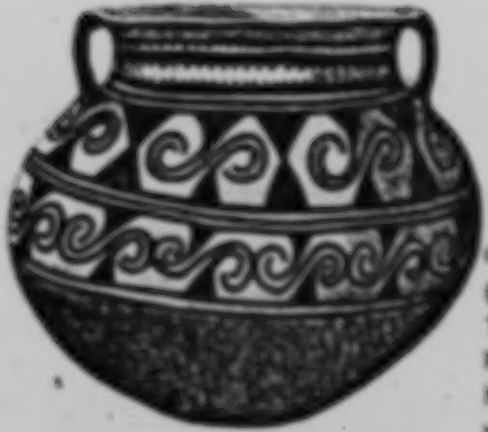
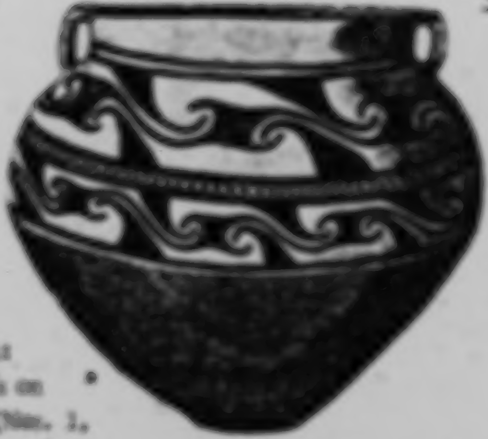
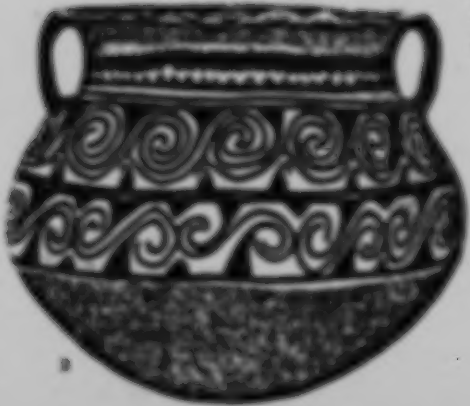
Plate I.





Chiriguano vessels (yambuí). Prov.: Yumbía (upper Pilcomayo). Colors: black and red motifs on white background. (Nos. 1, 3, and 4 = 1/5; 2 = 1/6 nat. size [illegible].)



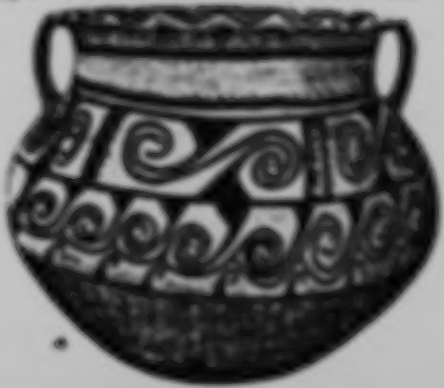


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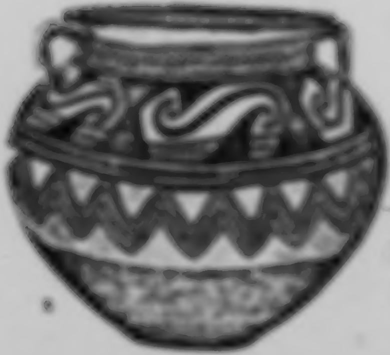
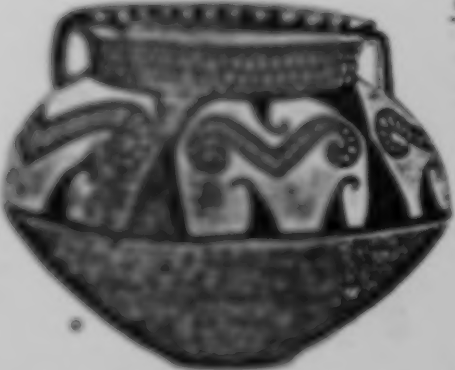
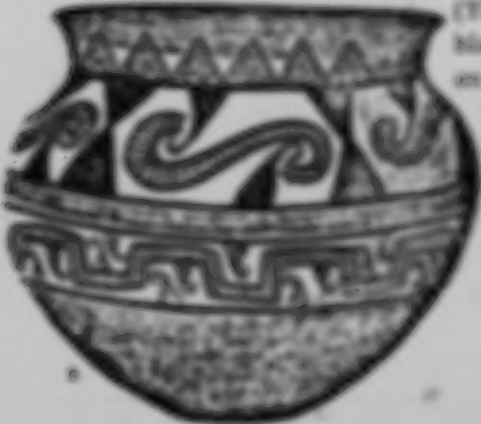
Plate II





Chiriguano vessels (yambuí). Nos.: 1, 2, and 3, Igñembé Valley; 4, Saladito (Tarichia). Colors black and red motifs on white background. (Nos. 1 and 2 = 1/4; 3 = 1/6; 4 = 1/3 nat. size [illegible].)



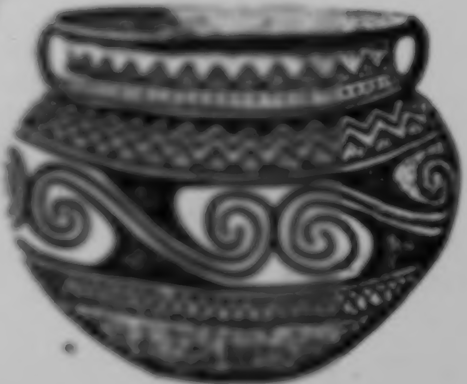


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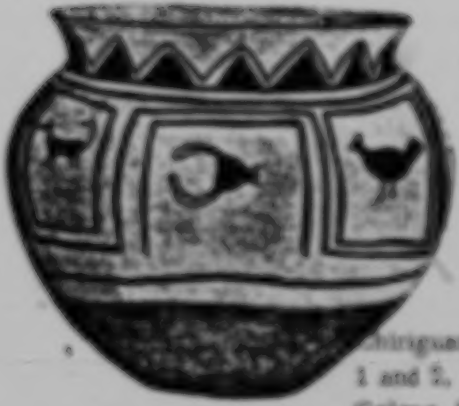
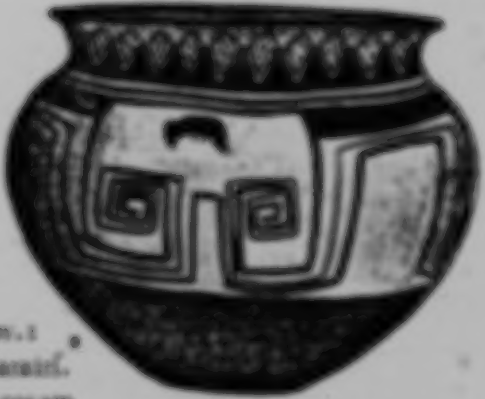
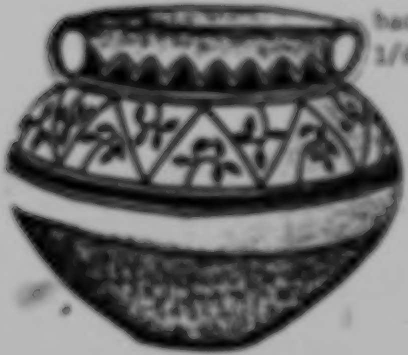
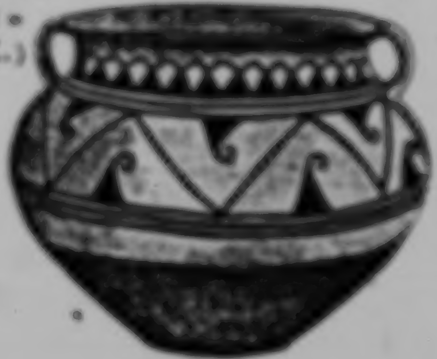
Plate LII



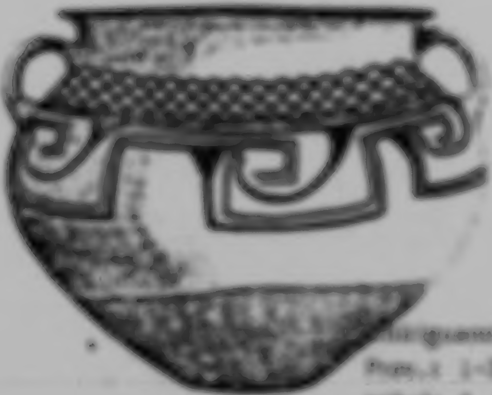


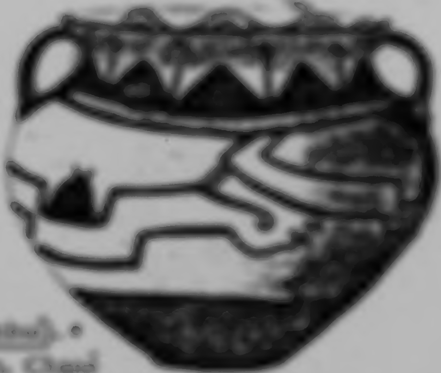
Chiriguano vessels (yambui). Pros. 1 and 2, Macharetí; 3 and 4, Tarairí. Colors: black and red motifs on cream background. (Nos. 1 = 1/8; 2 = 1/6; 3 and 4 = 1/5 nat. size ?.)





SI16 Chiriguano SI16 1930 (1950) 9-9 1931--Métraux ::

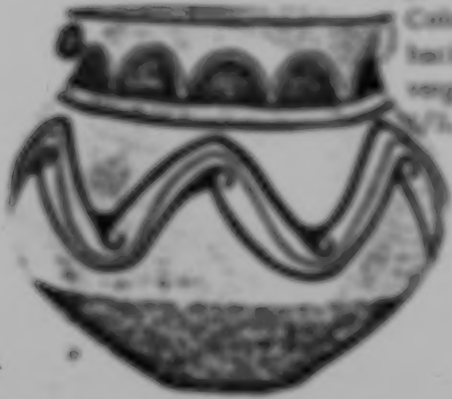




hiriguano and Chané vessels (continued).

Figs. 1–3, Aguaray (Salta Chaco, Chané tribe); 4, Tarupaya (upper Pilcomayo).

Colour red and black on white background; on No. 4 the black verges on brown. (Nos. 1, 3–4 = 1/3, 2 = 1/4 nat. size.)



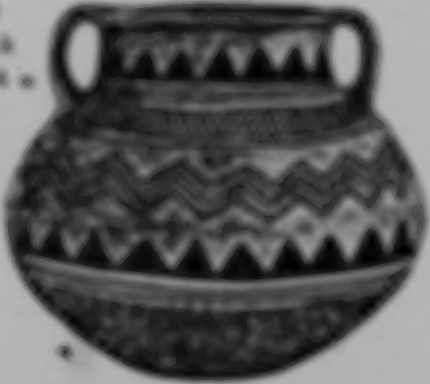
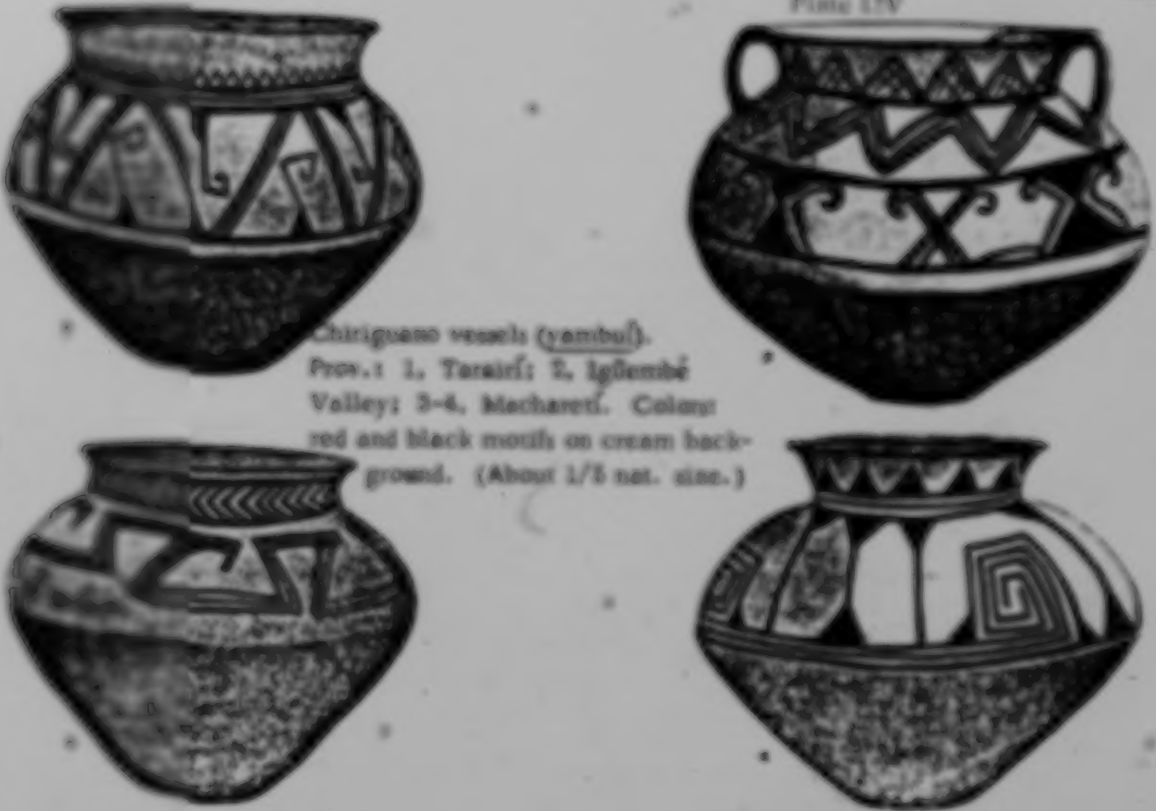


Plate LIV



Chiriguano vessels (yambuí).
Prov.: 1. Tarairí; 2. Igüembé Valley; 3-4. Macharetí. Colors: red and black motifs on cream background. (About 1/5 nat. size.)

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/451 cont./

The spiral as an independent decorative element has a much less wide distribution than when it is combined with the triangle it surmounts. In the geographical area which interests us it is known only on some pieces from the Quebrada de Humahuaca (Debenedetti, 3, Figs. 41 and 43, pp. 72-73; Boggiani, Figs. 176 and 178, pp. 170-172), on a calabash from Calama (Oyarzun, Fig. 10), from the Puna de Jujuy and from the valley of Yocavil (Ambrosetti, 6, Fig. 76, p. 66, and Fig. 88, p. 72, Vol. LIV), on a puco from Palodilon in the Santa Maria valley, Catamarca province (Outes, 1, p. 18, Fig. 10).

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Angles, triangles, and zigzag lines (Plate XXX, 1-66, Plate XXXI, Figs. 71-106, 177). Nearly all the yambuí and yapepo which form my collections are decorated on the interior rim, at the base of the neck, or on the upper part of the belly with interlaced angles, with series of triangles painted on the surface, which form denticulate bands. This decorative theme, simple and a bit monotonous, varies from one specimen to the other, according to whether the field of the triangles is sprinkled or surrounded with dots, whether the apexes are joined by angles or arcs of a circle, or, finally, whether or not these triangles are bordered by a broken line which they face.

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[164]

Triangles and zigzag lines only rarely constitute the fundamental decoration of vessels. On the upper Pilcomayo, the yambuí of Plate LIII, 4, is the only one exclusively decorated with triangular dots and parallel zigzag lines. Some pieces from Ivu and Caipipendí are characterized by the same simplicity.

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At Tacna and Taltal the series of triangular dots constituted a motif particularly dear to the populations of the Chincha-Atacama period (Uhle, 4, Plate XVII, Fig. 4; Plate XVIII, Figs. 1, 2, and 4; Plate XIX; Fig. 1 a; Plate XXII, Fig. 4; Plate XXIII, Figs. 3 and 4 and Figs. 21 and 22, pp. 40-41).

Prehistoric Chile SG3
Prehistoric Argentina SI3
Bolivian Prehistory SF4
Atacama SG5

C 531 171 PC 531 /421 cont./

In Chile, on the pieces influenced by Chincha art, there is the same abundance (Latcham, Fig. 28, p. 14; Fig. 53, p. 21; Fig. 59, p. 26; Medina, Fig. 206).

PA 531 171 /422/ In the whole northwest of Argentina, borders composed of triangles painted, striped, or reticulated are extremely frequent and do not form a type characterized clearly enough for anyone to try to give the distribution in detail. The latter extends from the Quebrada de Humahuaca to the Yocavil valley (Bregante, p. 182).

C P.A. B.P. 531 171 One of the varieties of this motif, however, is worth examining closely, for it permits establishing a striking parallel between present-day Chiriguano pottery and that of northwestern Argentina and southern Bolivia. It consists of a denticulate band or series of triangular dots and one or several zigzag lines which run parallel to these triangles. This decoration figures in my collections on the specimens of Plate XLI, 1, and Plate LX, 4. The archeological replica of this ornamentation is furnished by a vessel from Tolomosa (Tarija department, Bolivia), from Pabellon (Santa Maria, Catamarca), from Chañar Yaco (Catamarca) (see Rosen, 2, Fig. 166, p. 109; Outes, 2, p. 11, Fig. 8; Lafone Quevedo, 1, Fig. 5 e and f; Huaca E., p. 42). The excavations of the Messrs. Wagner at Llacta Maucta (Santiago del Estero province) yielded fragments of a dish whose patterns belong in this category.

A 531 172 The triangles which stand out against a background sprinkled with dots (Plate XLVIII, 1) and which form a band on the *yambuí* of Plate XXXV, 2, have their prehistoric equivalent at Taltal on a vessel of the Chincha-Atacama period (Uhle, 4, Fig. 21, p. 40).

PA 531 171 Series of triangles arranged horizontally are very often associated with the decoration of apodal or aryballoid vessels, which have been discovered in northwestern Argentina in such large numbers (see, for example, Boman, 2, Vol. I, p. 297) and, in general, over the whole extent of the Inca Empire.

/422 cont./

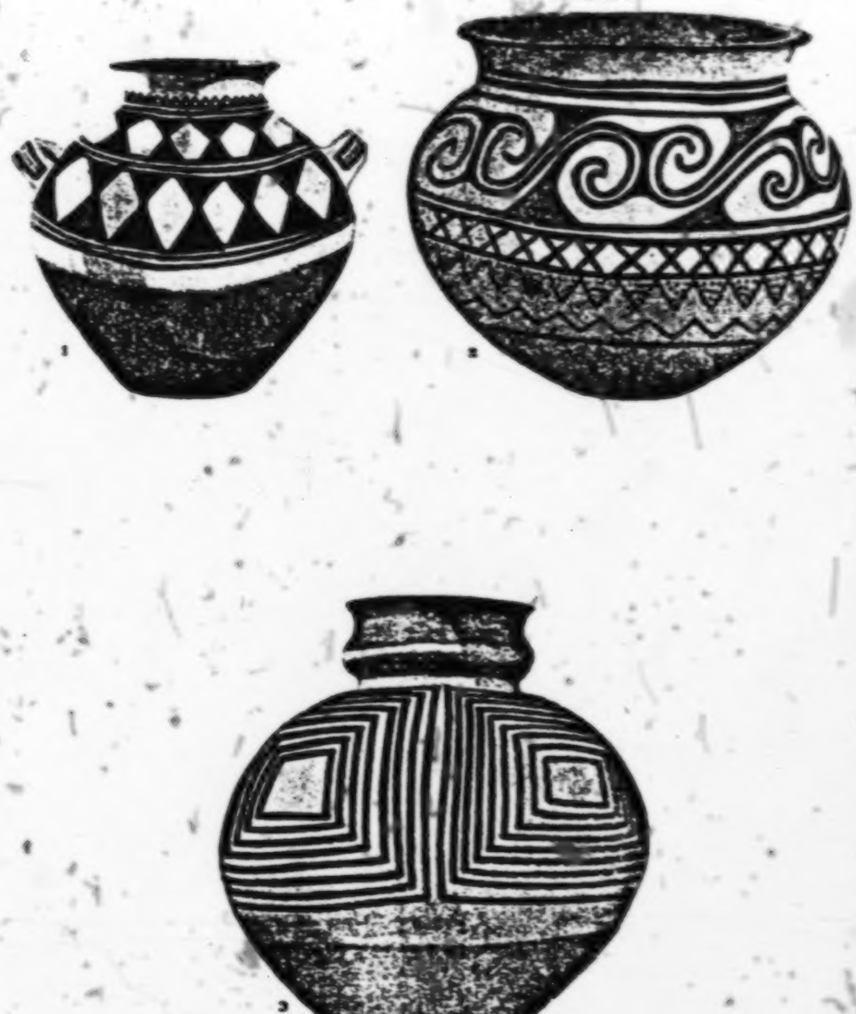
531 171 Festooned bands (Plates XXXI-XXXII,[1] 129-131). The series of triangles with which we have been occupied are often replaced by festooned bands (see, for example, Plate XLIX, 3; L, 1; and LIII, 3).[2] The transition from one of these motifs to the other is, so to speak, imperceptible; it is sufficient for the triangles to be slightly rounded for them to take on the appearance of a band of festoons. In northwestern Argentina the same transformation has taken place several times. A good example of it is the vessels from the Jachal (Bregante, pp. 179-181).

Isosceles triangles joined at the apex (Plate XXXI, 116-122). Two isosceles triangles joined at the apex form a design schematically representing an hourglass. This motif is rather common on Chiriguano pottery. In neighboring regions it is less frequent and seems to be peculiar to the pottery of Inca origin. Nordenskiöld (14, Fig. 69 a, p. 157) has already pointed out the close resemblance of this figure as it appears on several Chiriguano vessels with the one which decorates the ornithomorphic dishes /Plates LV-LVIII appear here/ /423/ of Cuzco. The analogy extends to the perpendicular lines which separate each one of the facing triangles from the following ones. This decoration is typically Inca. The ancestors of the Chiriguano copied this motif on several Inca specimens exactly like the ancient inhabitants of Tilcara, La Paya, and Catamarca who drew them: some, on a vessel with a lateral handle (Bregante, Fig. 320, p. 268), others, on a cup (Boman, 2, Vol. I, Plate XII, Fig. 26, and Plate XIV, Fig. f), and the last on an apodal vessel (Outes, 2, Plate III, Fig. 5). Outside of the "aryballuses," or purely Peruvian type vessels, the "hourglass" is a motif of rather rare use. It was painted on a vessel from Fuerte Quemado published by Ameghino (Vol. I, Plate X, Fig. 333) and on a vessel from Punta de Balasto (Lafone Quevedo, 2, Plate VII, Fig. a). Other examples could be cited, but I have neither the intention nor the means of being complete.

[1] [See pp. 199-200--Analyst]

[2] [See pp. 228, 229 and 232 respectively--Analyst]

Plate LV



Chiriguano vessels (yambuí). Prov.: 1 and 3, Ivu; 2, Saladito (upper Pilcamayo). Colors: 1 and 2, red and black motifs on cream background; 3, red motifs on white background. (Nos. 1 = 1/7; 2 = 1/6; 3= 1/7 nat. size ±.)

Plate LVI

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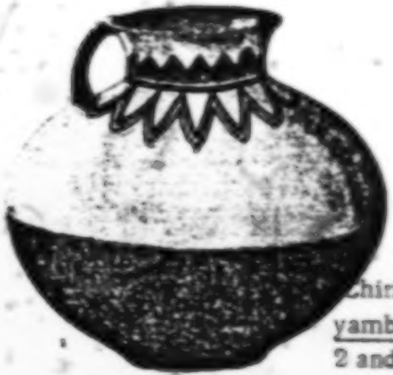

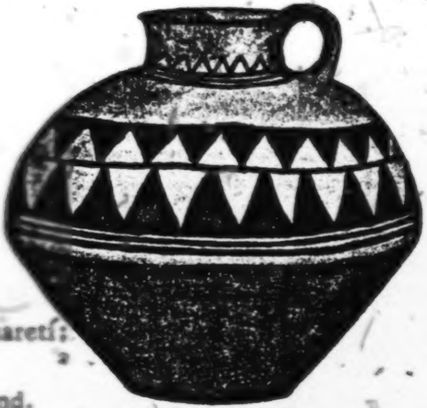
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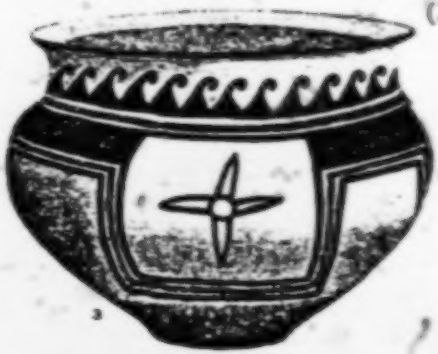
Chiriguano vessels (yapepó and yambuí). Prov.: 1 and 3, Macharetí; 2 and 4, Ivu. Colors: red and black motifs on cream background. (1/4 nat. size.)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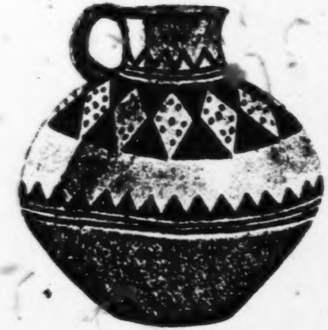
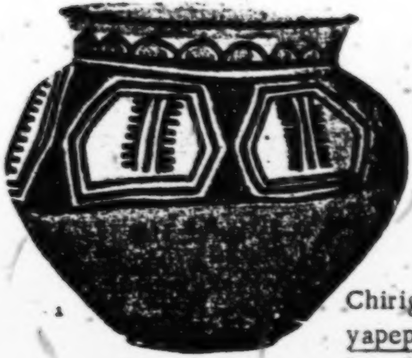


1: Métraux--238 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LVII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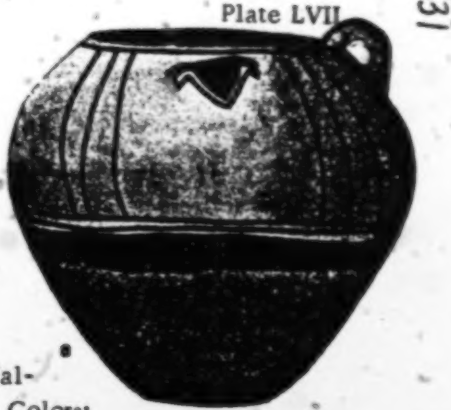
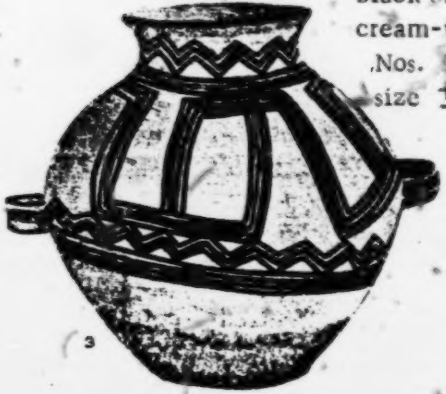


Chiriguano vessels (yambuí and yapepó). Prov.: 1, Igũembé Valley; 2, Carurutí; 3 and 4, Ivu. Colors: black and red motifs on cream-white background.
(Nos. 1 = 1/7; 2-4 = 1/5 nat. size ±.)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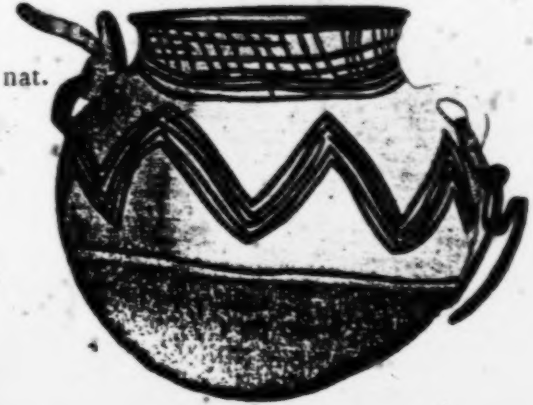

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1: Métraux--239 E-5 (1929) 1930 SF10-Chiriguano SF10

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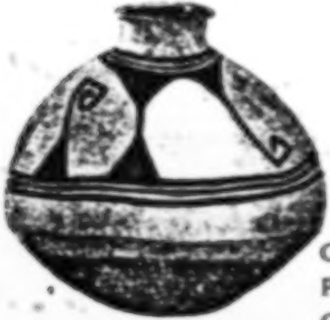
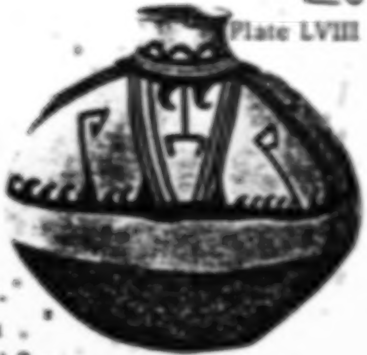
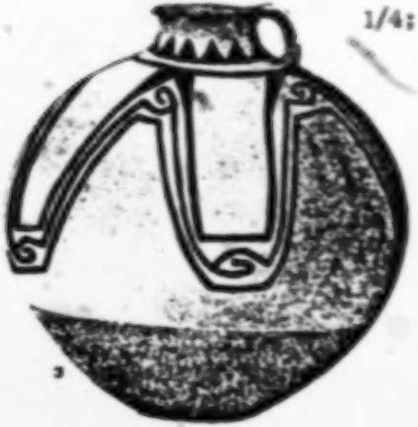
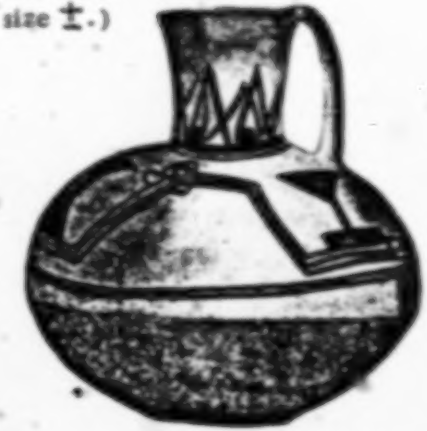
Plate LVIII









Chiriguano vessels (yapepó).
Prov.: 1-3. Macharetí; 4. Ivu.
Colors: red and black motifs on cream background. (Nos. 1 and 2 = 1/4; 3 = 1/6; 4 = 1/4 nat. size ±.)

1: Métraux--940 E-5 (1929) 1930 SF10 Chiriguano SF10

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/[illegible]/

This decorative element is no stranger to Chilean pottery either (Latcham, Fig. 42, p. 18, and Fig. 45, p. 19; Medina, Fig. 180, 202, 206, etc.). It figures also on the base of an Araucan vessel found in the territory of the Neuquen (San Martin, Plate 15, Fig. III).

Tooth-shaped triangular designs enclosing diamond shapes between them have been pyrographed on a calabash from Calama whose ornamentation matches that of our Chiriguano vessels.

Concentric diamond shapes (Plate XXX, 52-56). The series of concentric diamond shapes drawn on a goodly number of vessels in my collections had already been painted on the pottery of the Chincha-Atacama period at Tacna and Taltal (Uhle, 4, Plate XX, Fig. 2; Plate XXI, Fig. 2; and Guevara, plate between pp. 42-43) and pyrographed on the Calama calabashes (Oyarzun, Fig. 6).

P.A.
[531]

This design is classic, so to speak, on the aryballuses from Argentina (Boman, 2, Vol. I, Plate XVIII, Fig. 43, and Outes, 2, Plate III, Fig. 2).

PA
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Reticulated design (Plate XXX, 59-64). Several vessels in my collection have a reticulated band on the belly or neck. On the vessel of Plate LIV, 2, the triangles have this detail. On the subject of this motif, Odilia Bregante (p. 167) expresses herself as follows: "Reticulated decoration is found in the middle of the Yocavil valley beside pieces which bear the symbol of the triangle with spiral and the stepped element and even in modern cemeteries like that of Chañar Yaco (see, for example, Lafone Quevedo, 1, Plate VII, Fig. a). But it is in the northern regions, in Salta and Jujuy, that the greatest number of specimens of this reticulation are found and where it enters into the composition of characteristic embellishments. On the Isla de Tilcara, in the Pucará de Tilcara, and in other localities, the archeological material which includes this design forms the most interesting type of pottery and is abundant enough to be classified."

Prehistoric Argentina SI3
Prehistoric Chile SG3

P.A. /423 cont./

531 Some vessels from the Isla de Tilcara and the Pucará de C 531 171 Tilcara, /424/ as a matter of fact, have a reticulated band on the rim, like our Chiriguano vessels. (Debenedetti, 2, Fig. 45, p. 79, and Bregante, Fig. 164, p. 166.)

PC 531 In Chile we encounter bands, triangles, diamond shapes, reticulated rectangles, and there again the unity of these different cultures in whatever has to do with pottery asserts itself. (Latcham, Figs. 25-28, P. 14, and Bregante, Figs. 232, P. 192.)

P.A. C 531 171 415

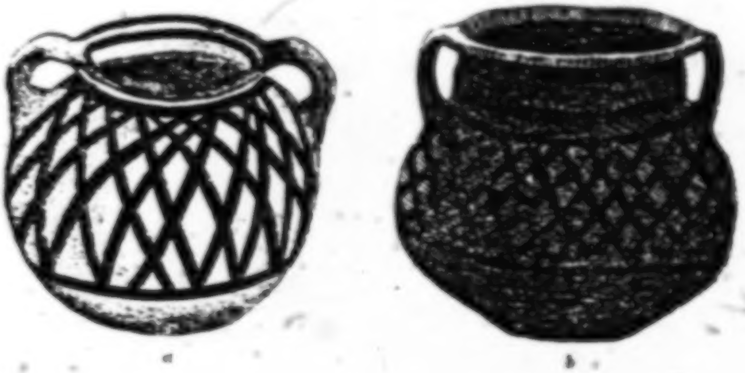


Fig. 82. Vessel b comes from the Chiriguano village of Tintapaw (upper Pilcomayo). It offers an extraordinary resemblance to vessel a from Tilcara. (1/2 nat. size.)

OUO Figs. 25-28, p. 14, and Bregante, Fig. 232, p. 192.)

C 531 171 Checkerwork (Fig. 76). A cup I acquired in the Igüembé valley is decorated in a brown and white checkered design. This is the only example I know in Chiriguano country. In northwestern PA [531] [171] Argentina this motif has a very wide distribution: it extends from the Quebrada de Humahuaca to San Juan province (Bregante, p. 196). It was common in Chile (Latcham, Fig. 7, p. 7; Fig. 41, p. 18; PC [531] Fig. 55, p. 22, etc.). In the post-Columbian period it was still in use among the Araucan of southern Mendoza (Métraux, 6, Fig. 12, p. 50).

Atacama SG5
Prehistoric Argentina SE3
Chane SF8
Diaguita SG6

/424 cont./

C Ce 531 171 PA [531]

Crenels, broken lines, Z-shaped lines (Plate XXXII, 154-155 and XXXIII, 200-206). While trying to define in the preceding pages the decorative style characteristic of the Chané of the Itiyuro and the Chiriguano of the region of the Franciscan missions, I mentioned single or multiple lines which, running around the belly of the vessel, form triangles, crenels, and Z's with elongated or linked strokes. At first sight these apparently capricious motifs seem to escape all comparison and one would almost be tempted to believe them autochthonous or constituting reminiscences of Guianan art. Nevertheless, their counterpart is found in the archeology of northwestern Argentina and, as expected, in that of the Quebrada de Humahuaca.

Ce 531 171 PA 531 SE PA [114]

Debenedetti (2, Fig. 75, p. 132, and Fig. 78, p. 135) reproduces a goblet found on the Isla de Tilcara, which has on its lower part a band /Plates LIX and LX appear here/ /425/ composed of three parallel lines broken at right angles. Mr. Debenedetti rightly compares this decoration with that of Chané vessels, of which he shows an example he attributes erroneously to the Choroti. The same remark may be made about some engraved vessels from the Arroyo del Medio, which in some respects are similar to our Chiriguano vessels (Boman, 2, Vol. II, Fig. 207, III, p. 843).

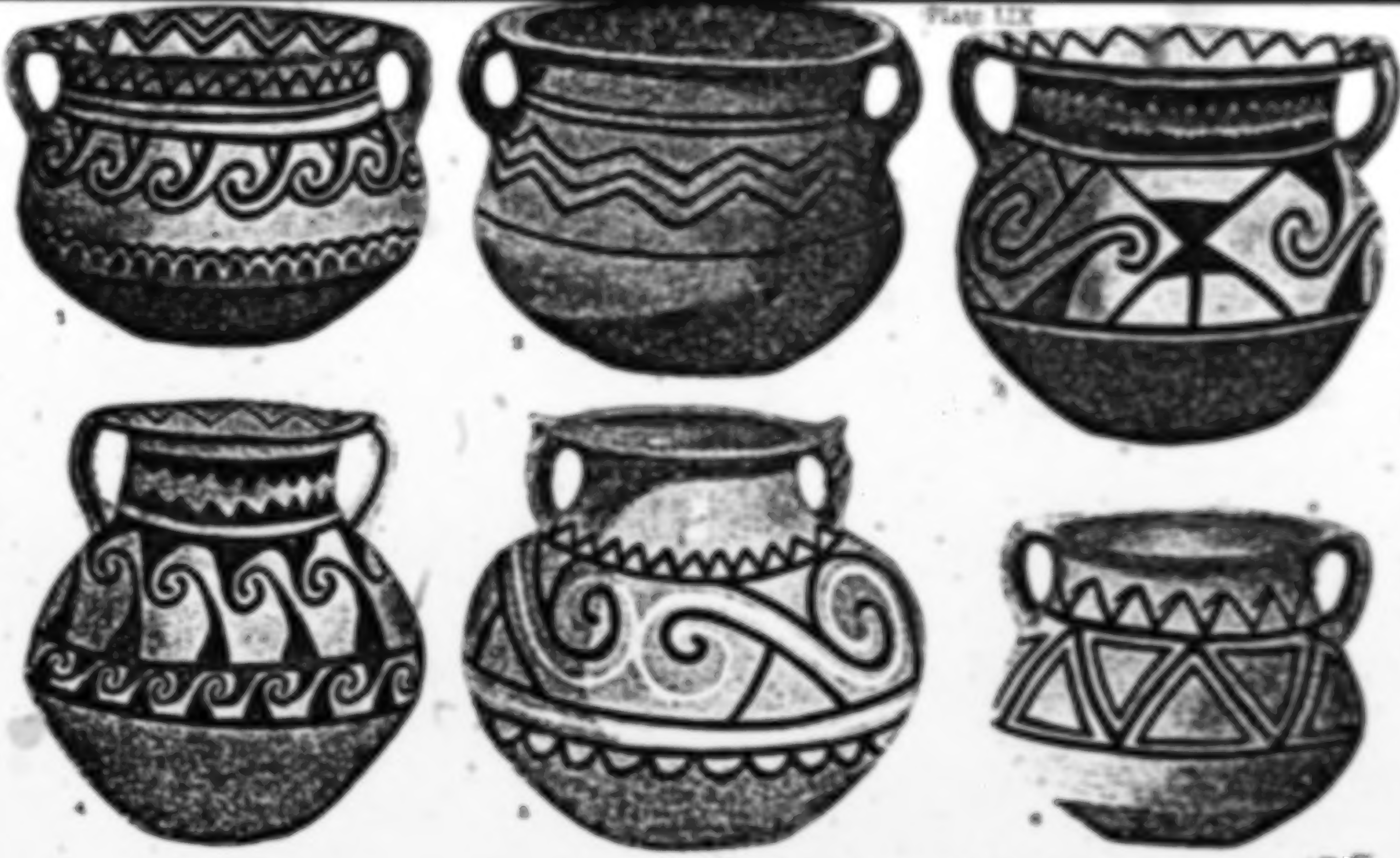
C 171 531 D [531] PA [531]

Much more striking yet is the resemblance between the Chiriguano yambui of this type and two vessels from the Diaguite region, one found at Molino del Puesto (Fuerte Quemado, Catamarca), and the other at Hualfin (Catamarca), both of which have been published by Bruch (2, p. 87, Fig. 88, and id., 2, Fig. 11, p. 8, and Fig. 27, p. 13). A puco from Llacta Mauca, province of Santiago del Estero, offers a similar design, to judge from a sketch by Mr. Duncan Wagner. There can be no doubt as to the Andean origin of this type of decoration.

A [531] [172]

Z-shaped motifs stand out again on a vessel from Tacna of the Chincha-Atacama period (Uhle, 4, Plate XXI, Fig. 1) and from San Felipe, Chile (Medina, Fig. 68).

Plate LIX



11 Mémoires--246 8-5 (1929) 1930 B710 Chicago 0710

[Caption for above plate on p. 246.]

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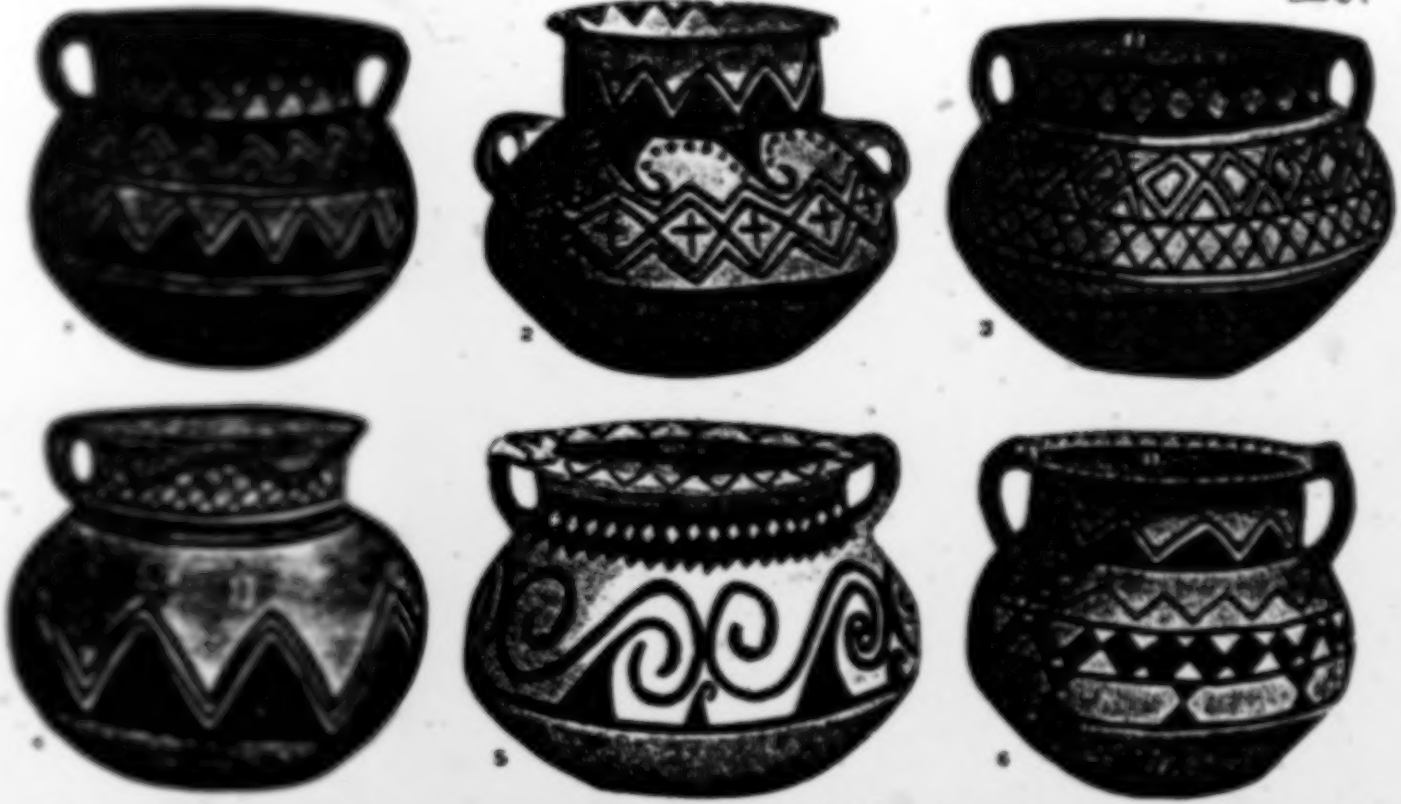
Plate LX



/Caption for above plate on p. 546./

/Captions for Plates LIX and LX, pp. 244 and 245./

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LIX Miniature Chiriguano vessels (yapepomi) (serve as containers). Prov.: 1, 3, and 4, Tumbía; 2 and 6, Ibopeytí; 5, Saladino (upper Pilcomayo). Colors: red and black motifs on white background; 5, red background. (Nos. 1-3 = 1/2 approximately; 4 = 2/5; 5 = 2/5; 6 = about 1/2 nat. size.)

LX Miniature Chiriguano vessels (yapepomi). Prov.: 1, Ibopeytí; 2, Tiwiraiti (upper Pilcomayo); 3, Tintapew; 4, Caipipendí; 5, Tumbia; 6, Tintapew. Colors: red and black motifs on cream background, with the exception of No. 2, decorated with black motifs on reddish background. (Nos. 1 = 1/3; 2-6 = about 2/5 nat. size.)

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/47b cont./

The large triangles which run around the belly of the ico and yambui from the mission region strongly resemble an analogous motif which covers the outside surface of vessels made by the Neuquen Araucan (San Martin, Plate XV, Fig. 7).

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Eyebrow-shaped design (Plate XLIX, 4).[a] A vessel from Saladino (upper Pilcomayo) has as its only decorative motif a strange decoration in the shape of a stylized eyebrow which stands out in white against a red background and is situated on the neck. This design is made up of two parallel lines separated by dots. In the presence of this curious motif one cannot help thinking immediately of the human faces painted on the funerary urns of the Diaguite region. The facial organs are overhung by a gigantic superciliary arch which, starting from the tip of the nose, descends to the height of the ears. The manner in which this part of the head is drawn recalls strongly the figure we are concerned with here.

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Cross. The vessel of Plate LX, 7, is decorated on the belly with a series of crosses inscribed in diamonds. This sign constitutes a decorative motif of which the present-day Chiriguano make exceptional use. Like the majority of the motifs painted on their vases, this one has no particular significance. A calabash from the same region is also decorated with pyrographed Maltese crosses (see Plate LXI, 1 /see p. 232/). We know the frequency of this ornamentation, symbolic or not, on the funerary urns of the Diaguite country, principally of the Santa Maria region (Catamarca), a frequency such that it warranted a book by Quiroga, some of the illustrations of which are interesting.

The cross appears also on a Taltal vessel of the Chincha-Atacama period (Guevara, plate between pp. 46-47 and 50-51), on a calabash from Calama /[illegible]/ (Oyarzún, Fig. 10), on another from the Puna de Jujuy (Ambrosetti, 4, Fig. 71, p. 68, Vol. LIV), and on a box from Morhuasi (Boman, 2, Fig. 73, Plate XXVIII), etc.

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Representation of the human face. The human face is not reproduced on any of the vessels I collected. Nordenskiöld (1, Fig. 26, p. 137) shows and describes a pot on whose rim a face was represented: the nose was in relief and the other organs painted on it. The similarity of this motif and the one decorating some pieces from the Andean region does not need to be emphasized.

[a] [See P 828--Analyst]

/530 cont./

[illegible] *Sign of unknown significance.* On the Machareti *yambui* (Plate [illegible]) was painted a crescent-shaped sign having in its concave part two dashes perhaps representing feet. The subject is doubtless a stylized bird, a presumption all the more plausible because another vessel from the same locality and made by the same hand is decorated with animal figures (dogs and toads) (Plate [illegible]).

This mysterious sign is very similar to the one found on a *puco* from Tolomosa in the Tarija department (Boman, [illegible], Fig. [illegible], p. [illegible]) and on some dishes from La Paya. These designs are also more or less stylized pictures of a bird. (Boman, [illegible], Vol. [illegible], Plate [illegible], Fig. [illegible], and Ambrosetti, [illegible], Figs. [illegible], pp. [illegible].)

Zoomorphic representations. Animal figures are rare in Chiriguano pottery, but their occurrence only brings out the better the similarities of this art to that of the neighboring Andean regions. The rows of *yaho* (*sapo del monte*) on the *yambui* from the Aguarey are the counterpart of the toads on the Diaguita funerary urns and the La Paya birds. The dog on the vessel in the plate appears nearly identical with the bottom of a *puco* from Molino del Puesto, Catamarca. ([illegible], Fig. [illegible], p. [illegible].)

531 171 105 The comparisons we have made could doubtless be extended and many another relationship noted between the modern pottery of the Chiriguano and that of the populations which have today disappeared from the Bolivian altiplano and northwestern Argentina. To continue such an investigation would be superfluous, for there is no one acquainted with the art which formerly flourished in the Andean and Chiriguano regions who would hesitate to establish a relationship between the two and would not have the second derive from the first.

As one might logically expect, these similarities become more numerous and more striking in proportion as one leaves the south and advances toward the north into the Andean zone which runs parallel to the habitat of the Chiriguano and Chané. When eastern Bolivia is methodically explored, models of the vessels which the ancestors of the Chiriguano admired and copied will be found.

[See p. 231 -- Analyst]

SI Métraux--769 E-6 (1930) 1930 [illegible] Chiriguano [illegible]
Chaco [illegible]

[illegible]

531 Lacking these, the study we have pursued brings us the establishment of a very important fact. The existence on the upper Pilcomayo of a pottery style closely related to that of the
105

6.

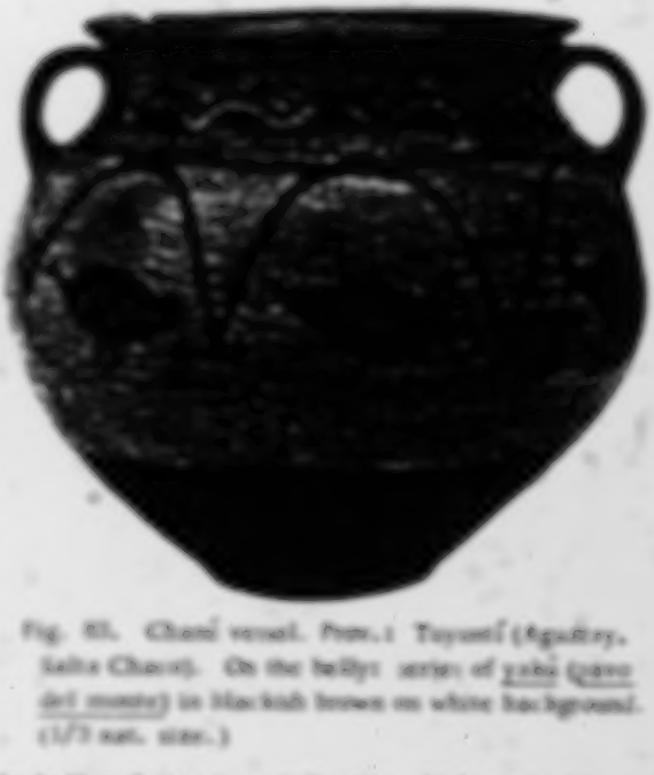

Fig. 83. Chané vessel. From Tuyuntí (Aguaray, Salta Chaco). On the belly: series of yahó (pavo del monte) in blackish brown on white background. (1/3 nat. size.)

C
531 Quebrada de Humahuaca is an indication which proves in a sure
191 way that the art of the former inhabitants of these regions was
192 identical to that of their neighbors, and perhaps racial brothers,
105 of the Bolivian altiplano.

Apropos of the Chiriguano, I believe it is wrong to speak of Andean or Inca culture. The first of these terms is too vague and the second partially false. In this chapter I have tried to demonstrate that Chiriguano pottery exhibits close affinities with that of the civilizations which, by their numerous points of similarity, seem to have undergone a Chincha or Atacama influence and which preceded Inca culture.

000 /427 cont./
C which preceded Inca culture. If one compares the present-day
531 pottery of the Chiriguano with that of the Quicha /Quechua/ of
171 Cuzco, certain analogies will appear, but they will be neither
105 abundant nor conclusive enough to establish a direct filiation. Aryballuses are missing or rare, ornithomorphic dishes seldom found, etc.; on the contrary, we have seen how multiple and close the ties are between this pottery and that of the Chincha-Atacama period. Chiriguano pottery, in relation to that of Cuzco, is in a situation analogous to that of northwestern Argentina: on an Andean but original base, influences from Cuzco have been superposed. This Inca action on the Chicha is attested to even today by /428/ the presence among the Chiriguano of footed vessels of the purest Inca type and apodal ones of the same origin. Arising from the same influence, one may add certain decorative motifs, with which I have already dealt.

A
[531] Arawak and Amazonian tradition is scarcely represented, ex-
[171] cept by footed bowls (compoteras), vessels with a ribbed belly,
[415] those with a body in the shape of a truncated cone and a subspherical belly, and perhaps by some motifs (T-shaped figures, Plate XXXVIII, 1).

The conclusion of this chapter will be: there exists today and for some years to come a civilization which, closely related to that of the Chicha, continues an art earlier than that of the Inca but influenced by them. May this fact make archeologists cautious!

Chapter VII

Calabashes

C
531 The second art in which the Chiriguano excel is pyrography
462 and engraving on calabashes. When pottery-making was an
[323] essentially feminine activity, pyrography was the province of the
C men. Nordenskiöld (9, pp. 233-236) thinks, completely
114 wrongly it seems to me, that pyrography is of Andean origin. He
531 advances in support of this opinion the advantages that knowledge
171 of metal offers to this art. Nevertheless, the populations of the
174
000

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/428 cont./ Nevertheless, the populations of the upper Xingú where Andean influence certainly was never felt have pyrographed calabashes, as do the Guató /Guato/ of the upper Paraguay. Pyrography is equally in use among the Indians of Guiana, on whom any influence by Inca civilization is very problematical. The distribution of pyrography in itself demonstrates that there is no need at all of possessing metal objects in order to practice this technique.

C 531 171

If one compares the motifs which decorate the calabashes I collected in the Chaco with those exhibited by the pyrographed calabashes found in northwestern Argentina, one is struck by the similarity of their style and the numerous analogies of detail they have in common. Thus, the Maltese cross which decorates a calabash from Jujuy (Ambrosetti, 4, p. 68, Fig. 70, Vol. LIV) is found again identically on the calabashes of Plates LXI, 1; LXII, 1; and the volutes of a maté from Tastil (Boman, 2, Vol. 1, Fig. 84 a) have their counterpart in the hooks incised on the specimen of Plate LXI, 2. On the fragment of a calabash discovered in the same region (Boman, 2, Vol. I, Plate XXXII, Fig. 84) and on another specimen from La Paya (Ambrosetti, 6, Fig. 288, p. 524), we have the prototype of the checkerwork which so often embellishes /Plates LXI-LXXI appear here/ /429/ Chiriguano calabashes (Plate LXI, 1 a, and Plate LXIV, 2). The reticulated bands which frame the decoration of one of the Calama calabashes (Boman, 2, Vol. II, Plate LXXV, Fig. 176 b) are frequently incised on those of the Chiriguano (Plate LXVI, 1 and 4; Plate LXIX, 3, etc., for example), just like the rows of triangles on a blackened field which appear on some calabashes from the Puna de Jujuy (Ambrosetti, 4, Figs. 61-63, pp. 65-66; Figs. 70-71, pp. 58-69, Vol. LIV) and on the fragment from La Paya already mentioned. The zigzag line which stands out in white on the reticulated background of one of the Calama calabashes

[Text continues on p. 265]

Plate LXI

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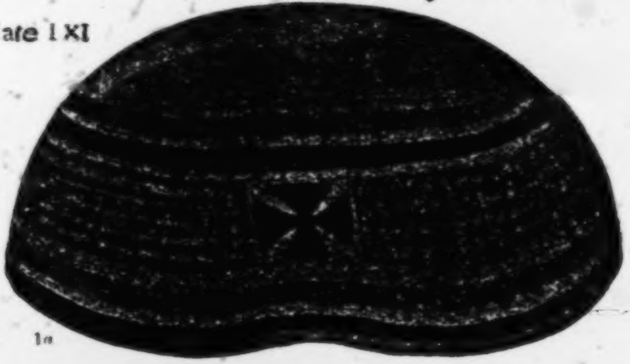
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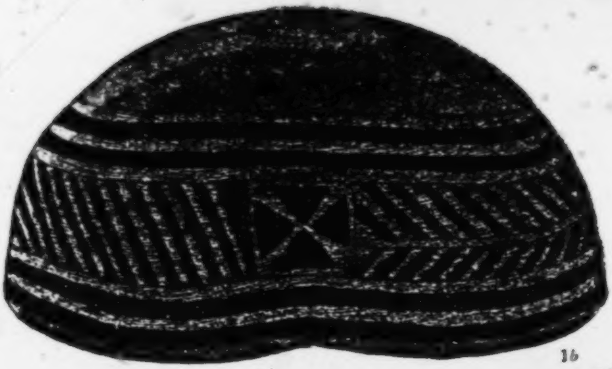
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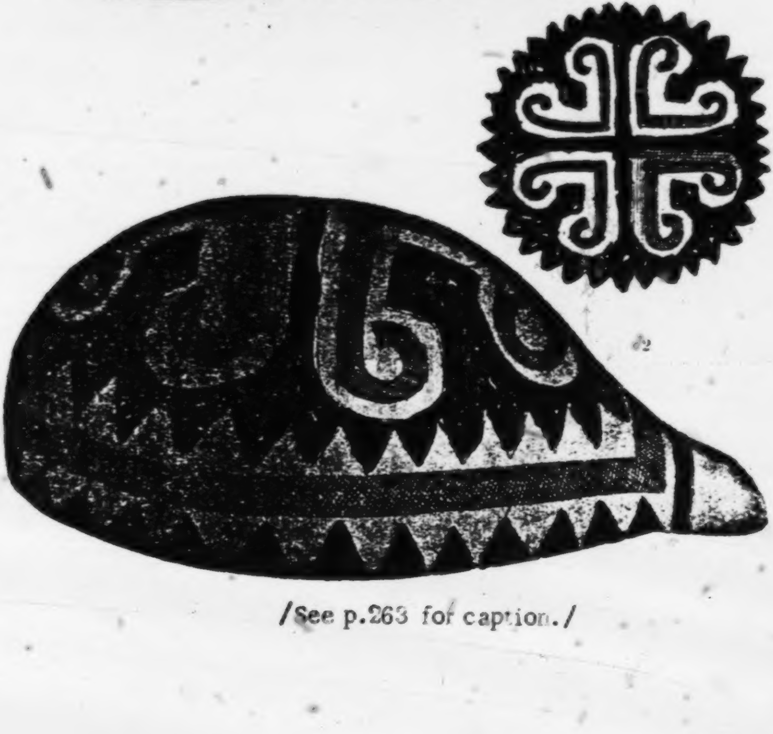
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/See p.263 for caption./

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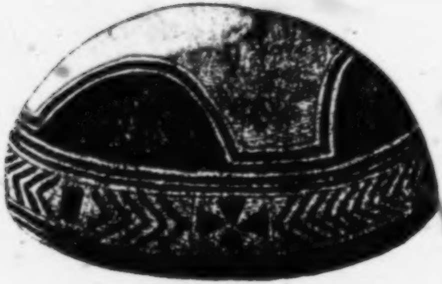
1: Métraux--253 E-5 (1929) 1930 SF10 Chiriguano SF10
Diaguita SG6

Plate LXII



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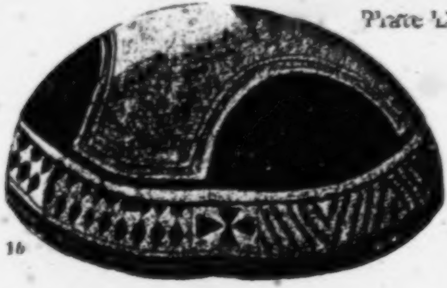

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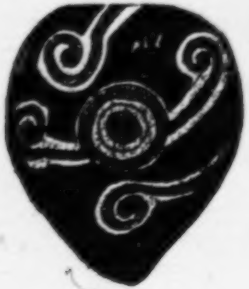

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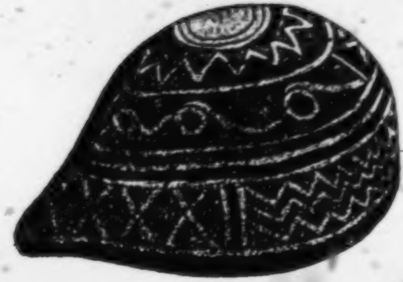

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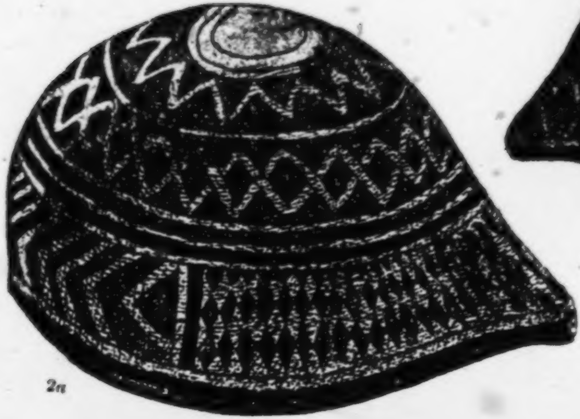

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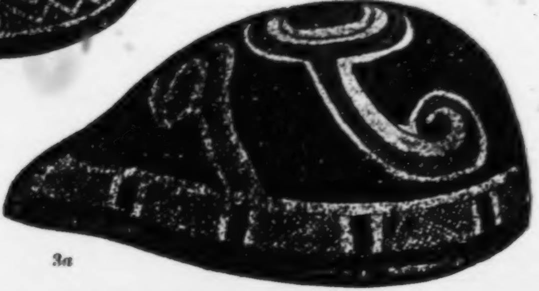

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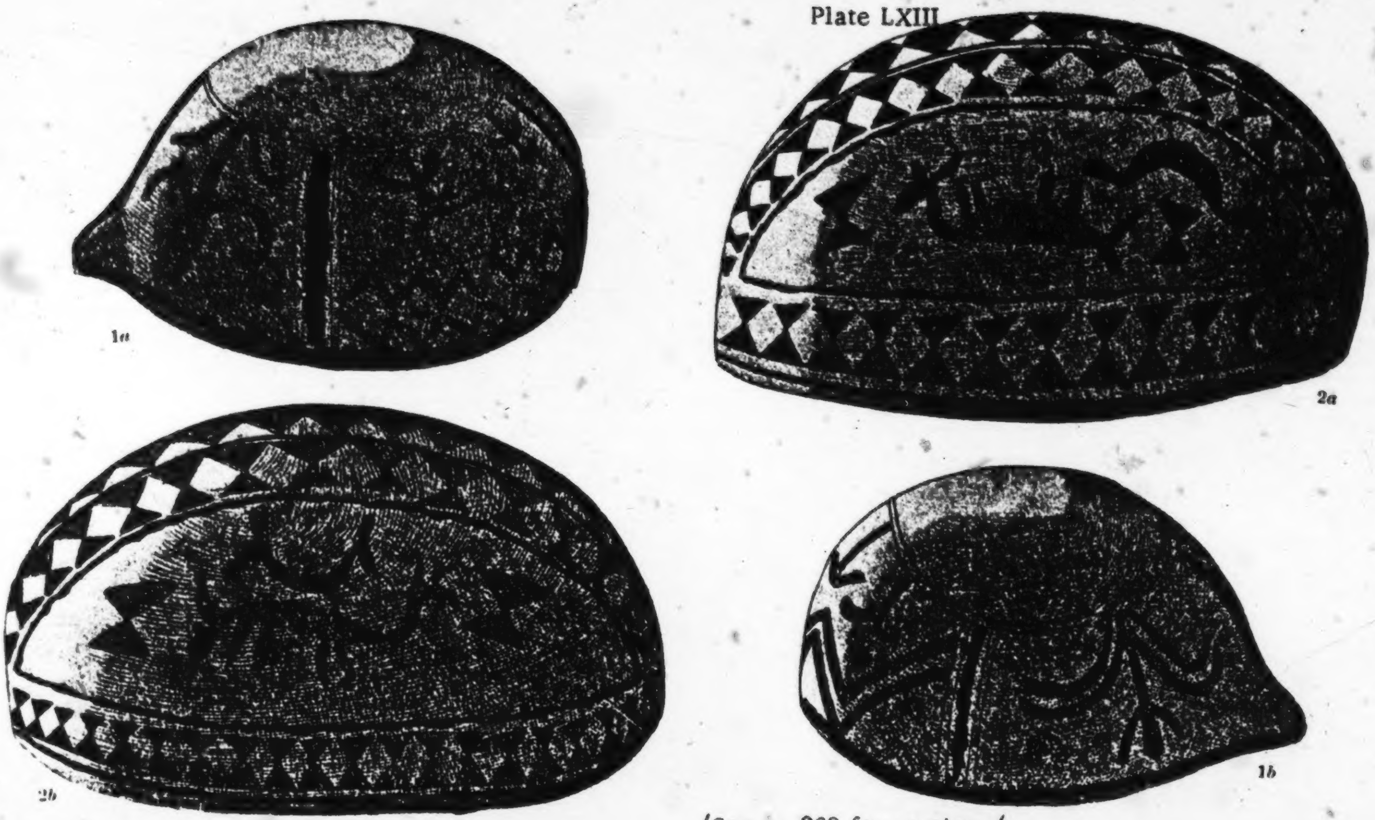
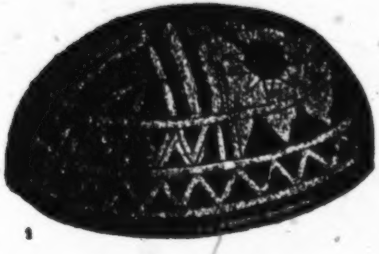
/See p. 263 for caption./

Plate LXIII



/See p. 263 for caption./

Plate LXIV



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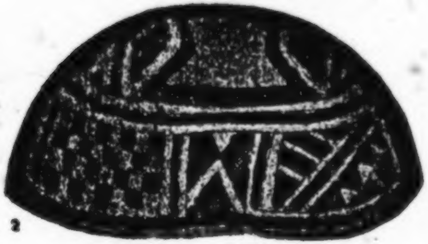

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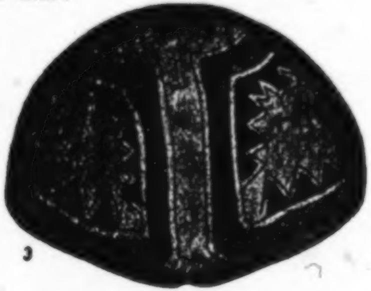

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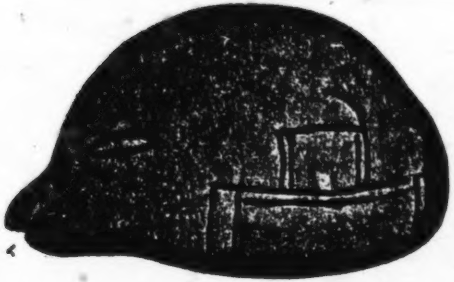

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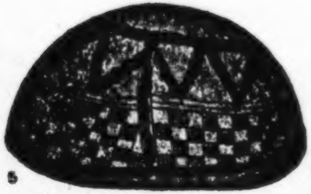

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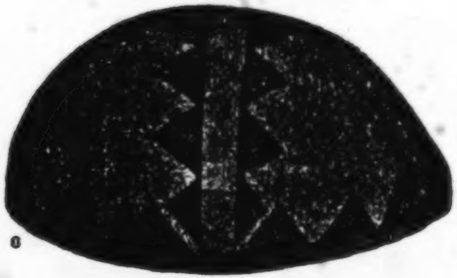

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Plate LXV

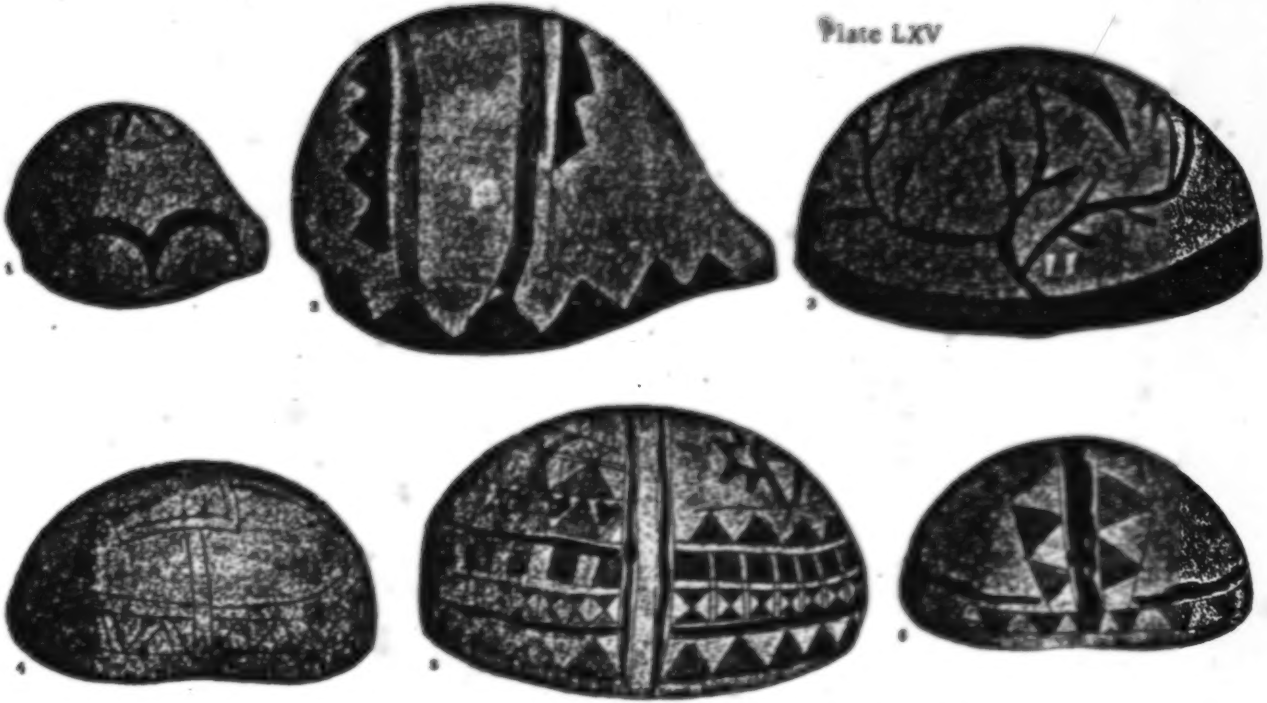

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Plate LXVI

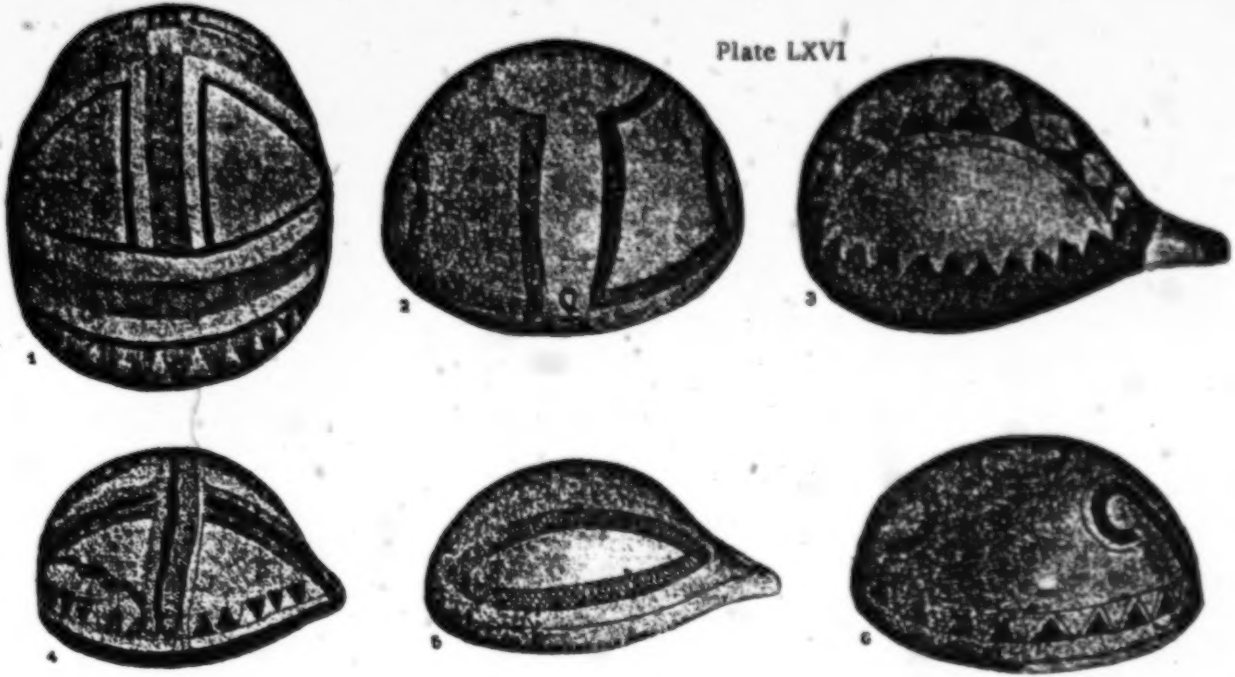

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Plate LXVII

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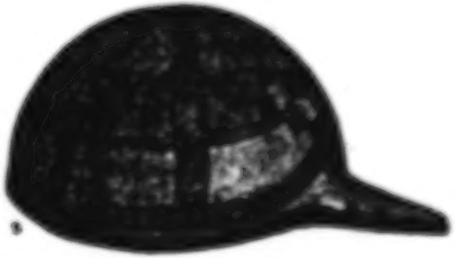
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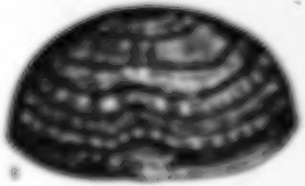
Plate LXVIII



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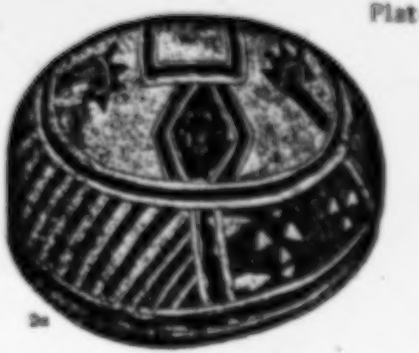

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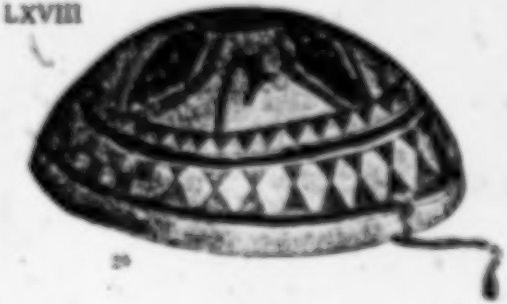

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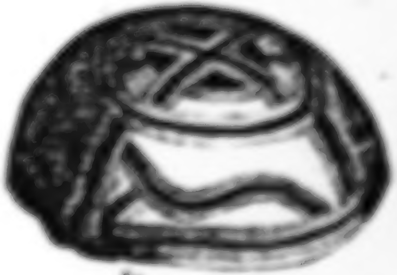

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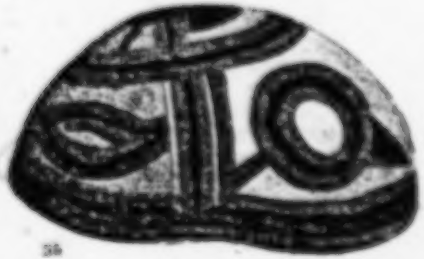

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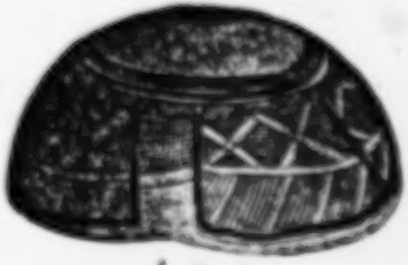

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Plate LXIX

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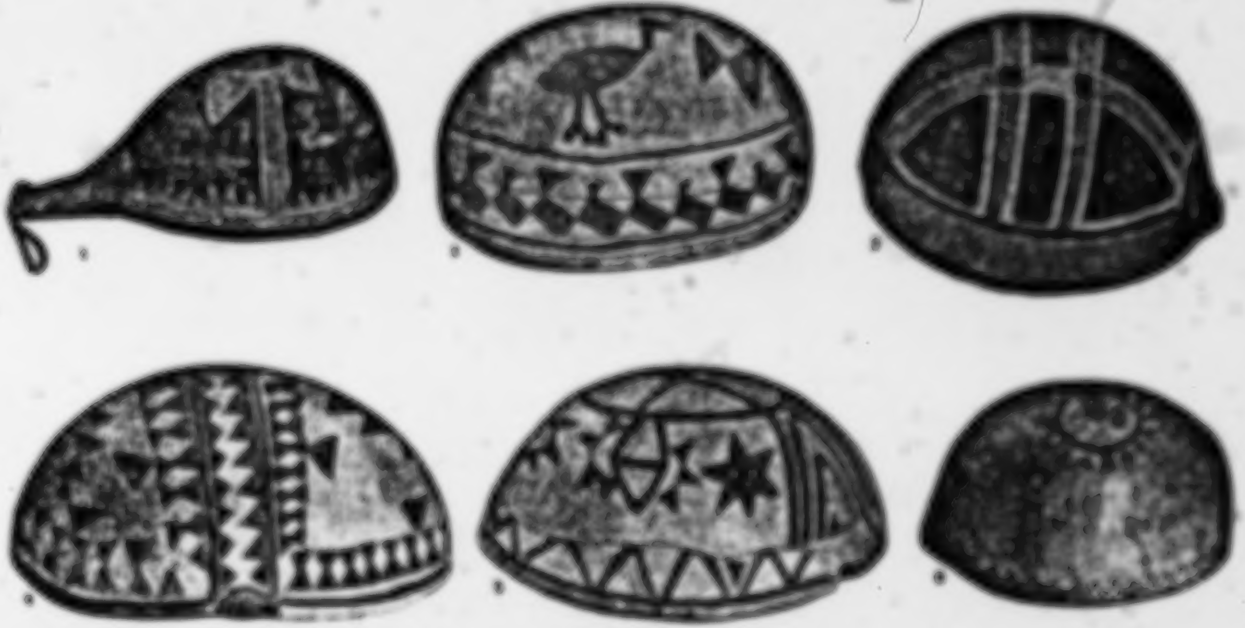

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Plate LXX

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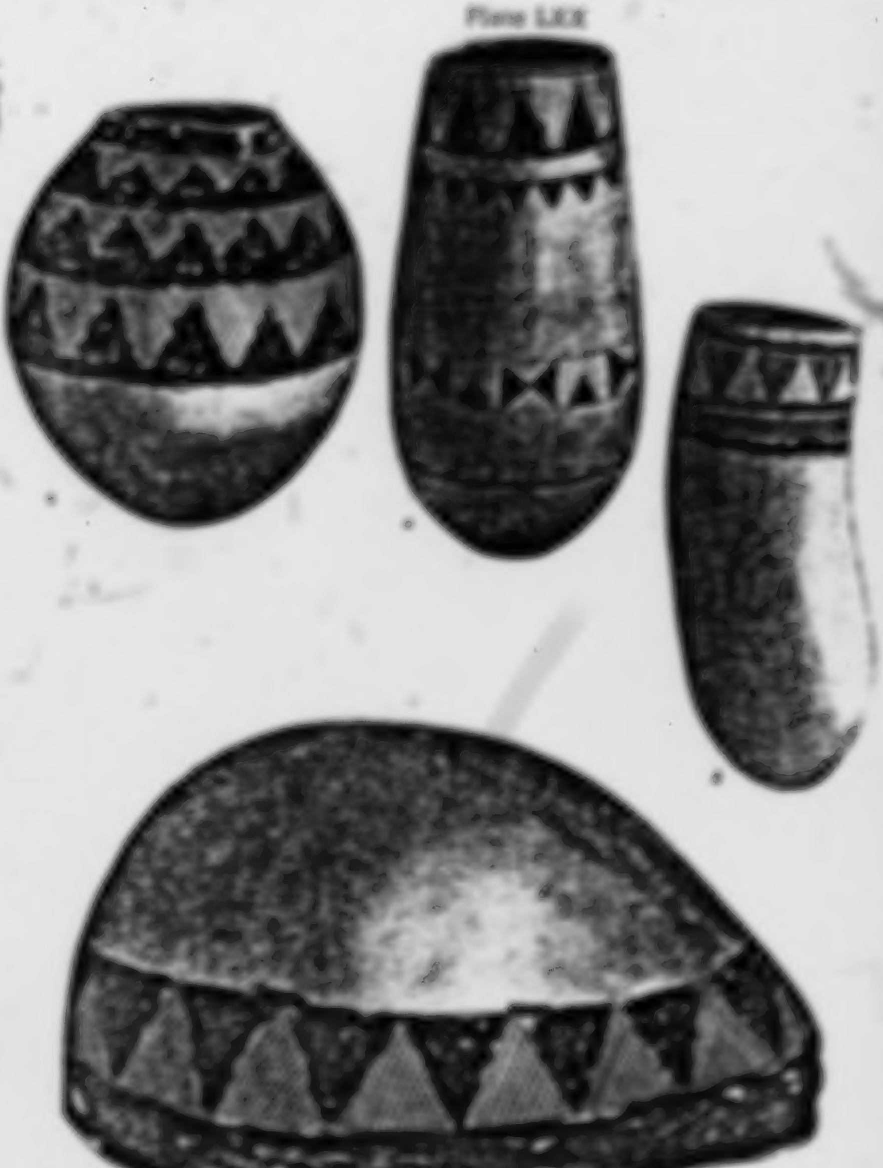

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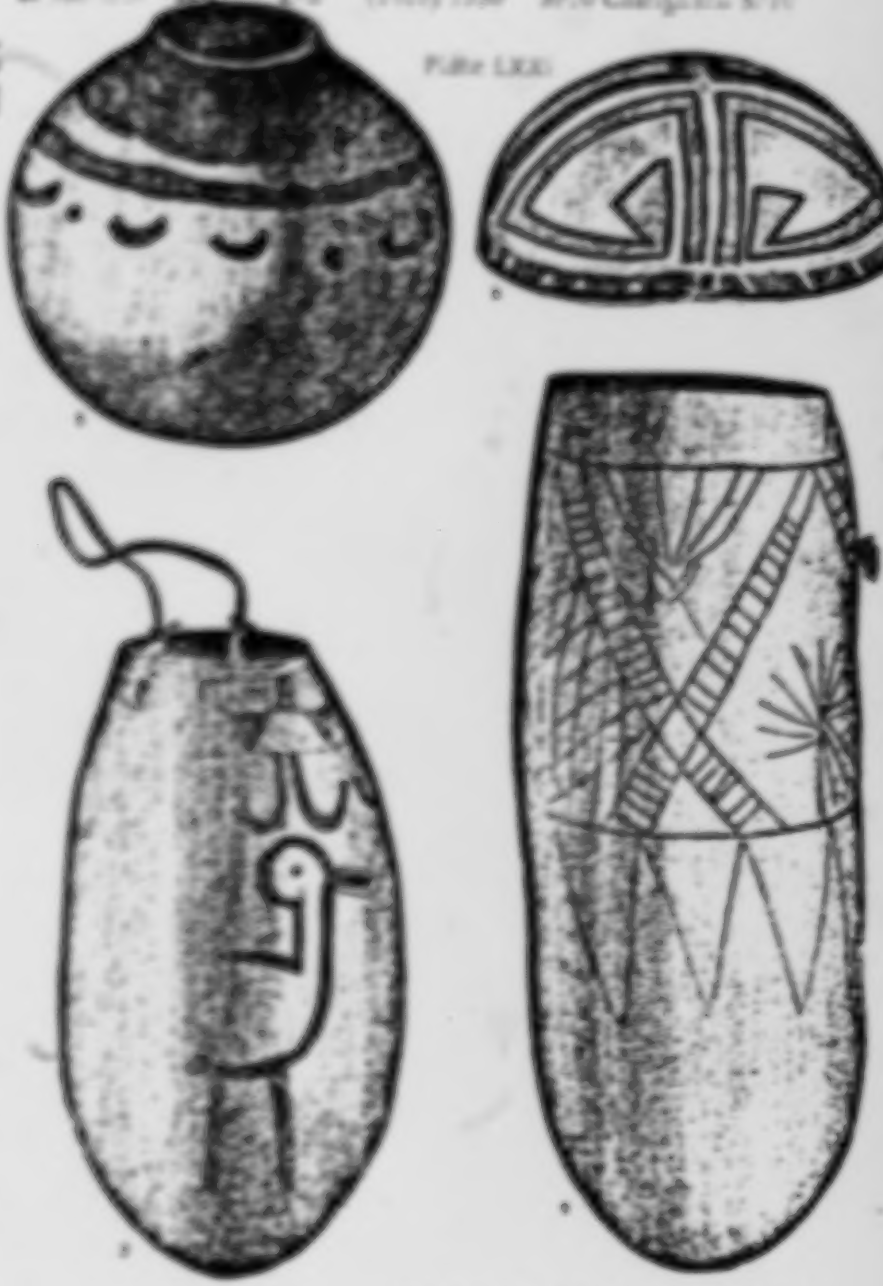
Plate LXXI



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/Captions for Plates LXI-LXXI, pp. 252-262./

C 415 531	LXI	Pyrographed and incised calabashes. Chiriguano. Prov.: 1a and b, Saladito (upper Pilcomayo); 2, Ivu. (Nos. 1 = 1/3 nat. size; 2 = 1/2.5 nat. size.)
D [415] [531]	LXII	Engraved and pyrographed calabashes. Chiriguano and Diaguite. Prov.: 1 a and b, Saladito (upper Pilcomayo); 2 a and b, Isirié (upper Pilcomayo); 3 a and b, calabash found in a funerary chamber (boveda) of the ancient Diaguite in "La Quebrada" (Valle del Cajón, Catamarca Province). This calabash was beside an adult skeleton. (Nos. 1 a = 1/2; 2 a and 3 a = 2/3 nat. size±.)
	LXIII	Incised and pyrographed calabashes. Chiriguano. Nos. 1 (a and b) and 2 (a and b) come from the Macharetí mission. Engraved motifs: 1, human personage and birds; 2 a, dog (?); 2 b, llama. (1/2 nat. size±.)
C [422]	LXIV	Incised and pyrographed calabashes. Chiriguano. Prov.: 1, Masaví (Igüembé Valley); 2, Achua (upper Pilcomayo); 3, Carurutí; 4, Macharetí; 5, Tiwiraití; 6, Caipipendí. Remark: Note the mark of ownership on Calabash 4. (Nos. 1 and 3 = 1/2; 2 and 4-6, 1/3 nat. size±.)
	LXV	Incised, pyrographed, and painted calabashes. Chiriguano. Prov.: 1, Tigüipa; 2 and 6, Macharetí; 3, Ivu; 4, Saladito; 5, Tiwiraití (upper Pilcomayo). Remark: Calabash No. 3 is painted with roucou. (About 1/2 nat. size.)
	LXVI	Incised, pyrographed, and painted calabashes. Chiriguano. Prov.: 1, Santa Rosa; 2, Mangarati; 3 and 6, Caipipendí; 4, Masaví; 5, Carurutí. Remark: All the lower part of 3 is painted with roucou. (1/2 nat. size.)

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531 /Captions for Plates LXI-LXXI, pp. 252-262 cont./

LXVII Incised, pyrographed, and painted calabashes. Prov.: 1, Caratindi (Igũembé); 2 and 6, Macharetí; 3, Tiwiraiti; 4, Tintapaw (upper Pilcomayo); 5, Caipipendí. Remarks; On No. 3, more or less deformed numbers. Calabash No. 4 is painted, pyrographed, and incised. (Nos. 1-5 and 5 /sic/ = 1/2; 4-5 /sic/ = 1/5 approximate nat. size.)

LXVIII Incised and pyrographed calabashes. Prov.: 1, Ñawirenda; 2 a and b, Caratindi (Igũembé Valley); 3 a and b, Yumbía; 4, Ibopeytí. Remark: On No. 3 a and b a very stylized bird has been represented. (Nos. 1-3 = 1/2; 4 = 1/3 approximate nat. size.)

LXIX Pyrographed and incised calabashes. Chiriguano. Prov.: 1 and 3, Caipipendí; 2 and 4, Macharetí; 5, Tiwiraiti (upper Pilcomayo); 6, Ñawirenda (upper Pilcomayo). Remarks: Calabash No. 1 is decorated with a series of engraved numbers going from 1 to 10; Calabash No. 6 with motifs clearly European in inspiration. (Nos. 1, 3, 5, and 6 = 1/2; 2 and 4 = 1/3 approximate nat. size.)

[801]
[177]

LXX Incised and pyrographed calabashes. Chiriguano. Prov.: 1 and 4, Tarairi; 2, Macharetí; 3, Caipipendí. (Nos. 1 and 2 = 1/3; 3 = 1/2; 4 = 1/3 approximate nat. size.)

LXXI Painted, incised, and pyrographed calabashes. Prov.: 1, Ivu; 2, Igũembé; 3 and 4, Caipipendí. (Nos. 1-3 = 1/2; 4 = 1/3 approximate nat. size.)

C
531 171 /429 cont./

(Boman, 2, Vol. II, Plate LXXV, Fig. 186 c) reappears nearly identical on the pretty calabash of Plate LXII, 2.

C D 531 171 I can give no better argument in favor of the close analogy between the calabashes of the Andean region and those of the modern Chiriguano than by publishing the calabash of Plate LXII, 3 a and b, found in Diaguite territory in Catamarca province ("La Quebrada," Valle del Cajón). Its decoration is composed of incised and finely reticulated bands on a blackened background. The hooks which leave from the circle engraved on the top of the calabash and the sides of the latter strangely recall analogous motifs we have seen on Chiriguano specimens.

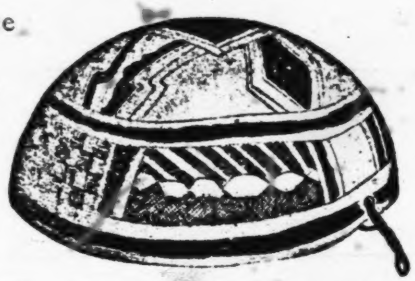

Fig. 84. Incised and pyrographed calabash. Prov.: Caratindi (Igüembé Valley). (About 1/2 nat. size.)

C 531 171 The spiral, which seems to have been a motif especially dear to the pyrographers of northwestern Argentina and the Atacama Desert, does not occur on any of the specimens in my collections, if one does not want to consider as rudiments of spirals or as degenerated spirals the hooks we see on some Chiriguano calabashes (Plate LXI, 2). It is interesting to ascertain that the spiral and the voluted triangle of Andean calabashes are typologically closely related to analogous motifs which the Chiriguano women of the upper Pilcomayo paint on their vessels. If these designs have been better preserved in pottery than in pyrography, it is doubtless due to the fact that the first art has remained closer to its origins. C 323 462 The women, who have the monopoly of it, are more conservative than the men, who decorate the calabashes.

/429 cont./

531 On almost all the calabashes in my collection, pyrographed
171 designs alternate with incised motifs. Perhaps it is the same
with the calabashes of the Andean region. Judging from the ex-
[114] cellent photographs which Boman (2, Vol. II, Plate LXXVI)
gives us of them, and from /430/ the specimen from the
Calchaqui valley which I am publishing here, this scholar
erroneously considers them as having been entirely pyrographed.
When a Chiriguano incises a design with a knife on a calabash,
he is always careful to fill the engraved lines with ashes to make
them stand out. At first sight this process may be confused with
true pyrography.

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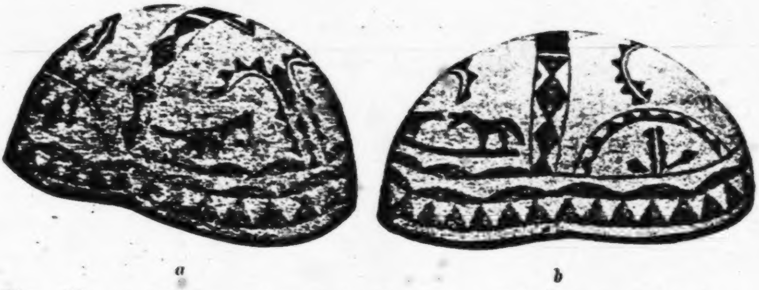

Fig. 85. a and b. Engraved calabash. Only the rim has been lightly pyrographed. On one side (a) is seen a feline animal (jaguar or puma), on the other (b) a fox (?) and a bird. Prov.: Masaví (Igüembé Valley). (About 1/2 nat. size.)

531 A single glance at Plates LXI-LXXI allows one to realize that pyrography and engraving on calabashes do not obey such rigid stylistic rules as pottery. These calabashes differ very much, and there are scarcely any motifs that seem to be preferred to others. To what is this diversity due? I believe it artificial; and I am convinced that formerly this art followed precise norms, in a word, that in times past there was a true style of pyrography and engraving on wood. How would one explain otherwise that precisely the most beautiful pieces in my collection are at the same time the oldest and the most similar to the Andean prototypes (Plate LXI, 1 and 2; LXII, 1 and 2; LXIV, 2; LXVIII, 2 and 3, etc.)? Let us not forget that

177 531 [462] [167] /430 cont./ Let us not forget that pyrography is a masculine activity and that men are more open than women to every innovation. Moreover, for the most part they have gone to Argentina, and from there, with a new turn of mind, they brought back models and inspirations foreign to their ancient tradition. This European influence is patent in many cases; thus, the calabash of Plate LXVII, 3, and the one of Plate LXIX, 1, are decorated with Arabic numbers. The calabashes of Plates LXIV, 1, LXV, 1 and 5, and LXIX, 5, are decorated with stylized flowers or stars which are not Indian at all. The influence of the white men and their bad taste is evident in the motifs painted in roucou which decorate the calabash of Plate LXV, 3.

531 Anthropomorphic or zoomorphic representations are commoner on calabashes than on pottery. A rough drawing of a man greatly schematized /43[illegible] is represented on the calabash of Plate LXIII, 1 a and b. On the calabash of Plate LXIII, 2 a, dogs have been engraved and birds on those of Plates LXIII, 1, LXVIII, 3 a and b, LXIX, ?, and LXXI, 3. A llama was represented in very expressive fashion on calabash No. 2 b on Plate LXIII; and on the calabash of Fig. 85 a and b one recognizes a horse and a feline animal, a puma or jaguar. Three fish and a bird appear on the specimen of Plate LXVII, 2.

531 322 386 The Indians of the Ivu mission and the ones from the Caipipendí valley paint their calabashes with roucou. This color is very difficult to rub off and does not spread beyond the periphery of the colored designs. /Fig. 86 appears here. To obtain this result, the Chiriguano begin

C /431 cont./

531 322 386 by taking off the epidermis which covers it, except at the places which are to remain uncolored. Then they smear its exterior surface with roucou and scrape the tegument where they have saved it. The figures then stand out in red against a yellowish background. An analogous process is in use among the Pauserna (Nordenskiöld 5, p. 344). The motifs decorating most of the

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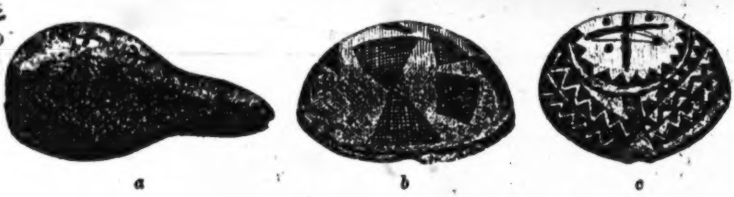

Fig. 86. a, b, and c. Miniature calabashes, "liqueur glasses" and children's toys. Chiriguano and Chané. Prov.: a, Tuyunti, near Aguaray (Salta Chaco); b, Ñawirenda (upper Pilcomayo); c, id. (About 1/2 nat. size.)

C 531 177 The motifs decorating most of the painted calabashes I collected in Ivu are unfortunately very much influenced by European models, and beside very pretty designs one finds others of the most distressing banality.

/431 cont./

Chapter VIII

Weaving

286 [177] Weaving is a very widespread industry among the Chiriguano. Unfortunately, at the present time its products are commonplace and, since they have been using aniline dyes (1), often very ugly.

> 386 824 1. The Chiriguano used to extract blue dye from a plant they call kaa-howi, that is to say, "blue grass." They also used to grow it. In order to color their tiru (large sleeveless bag slipped on over the tipoy, of the same shape but less ample), they dipped them into a decoction of this grass. Sometimes also they used to add coloring woods, such as palo soto or quebracho, to this bouillon. The leaves of a tree which easily reaches a height of eight to ten meters, the iwira kaa-howi, also furnish a blue dye, but for that they must be young and the tree must be in bloom.
>
> With piari, black resin which exudes from the trunk of the algarroba (Prosopis), Chiriguano women blacken the tiru which they had dyed blue. (Diccionario Chiriguano-Español y Español-Chiriguano, etc., pp. 16-17 and 173.)

286 [291] [177] Most of their ponchos are copied from those of the Bolivian half-breeds.

/432/ The type of loom prevalent among the Chiriguano is the one which has been given the name Arawak loom. Plate LXXII[1] gives an idea of it. Two forked sticks are set in the ground. They support two /Fig. 87 appears here/ parallel crossbars, one of which, the lower one, is a pestle of hard and heavy wood. The warp threads are rolled around them, but at each circuit turn back on themselves after going over a /433/ small cord stretched parallel to the ground. Once the cloth is finished, this string is removed, and in an instant the piece of cloth, which until then formed an endless band, opens up (Fig. 91).[2]

[1] [See P. 294--Analyst]

[2] [See P. 295 -- Analyst]

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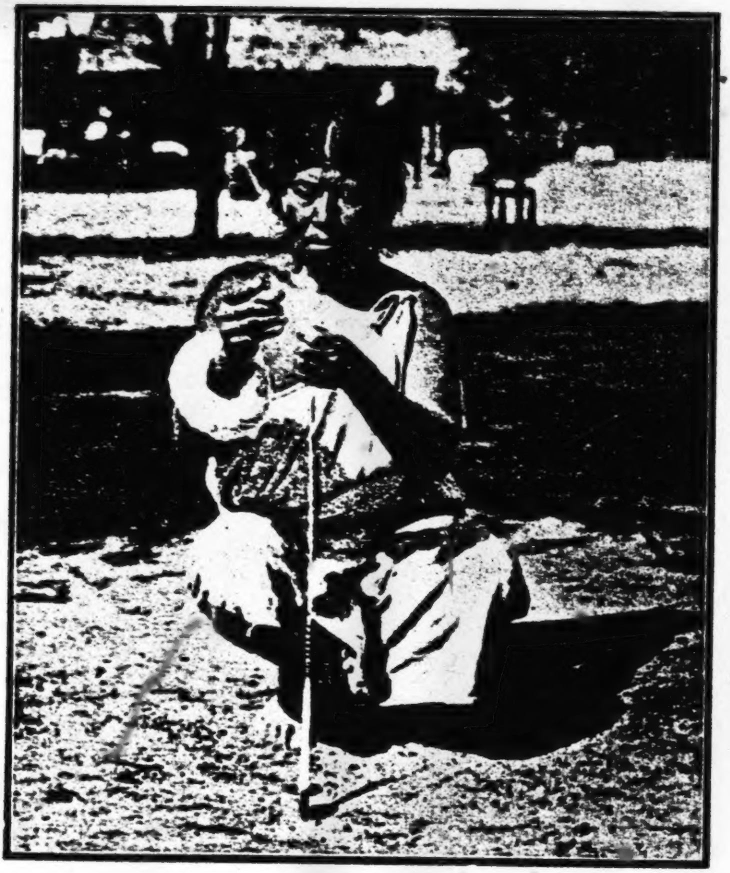

Fig. 87. Chiriguano woman getting ready to spin. Carurutí. (Photo. A. M.)

286 The reed of our European looms is replaced here by an /Fig. 88 appears here/ interlacing of threads which grasp one thread of the warp, then the other, alternately.

286
413 The woof is passed through with the help of a shuttle whose motion back and forth is facilitated by a weaver's sword (iwirapé) which separates the warp threads. This latter instrument is used to tighten the cloth each time the woof has passed through. A
[237] mammalian metatarsal bone sharpened to a point (Fig. 92) or a small pointed or spindle-shaped stick (Figs. 93 and 94) permits

/433 cont./

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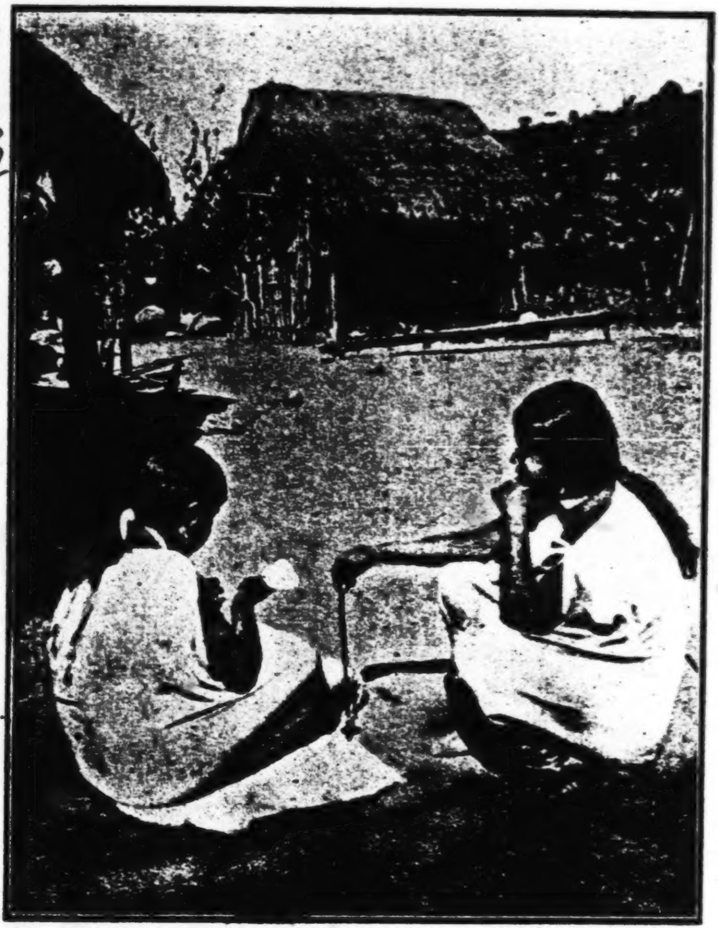

Fig. 88. Chiriguano girls spinning. Masaví (Igüembé Valley). (Photo. A. M.)

286 413 moving the front /434/ warp threads back each time they have been crossed with the help of the reed. The woman who has just passed the woof through grasps this dagger firmly and with a sharp blow raises the threads of the warp after pulling on the reed. Difficult jobs, probably the execution of some /Fig. 89 appears here/ complicated figures, are accomplished with a wooden needle, which unfortunately I never saw used.

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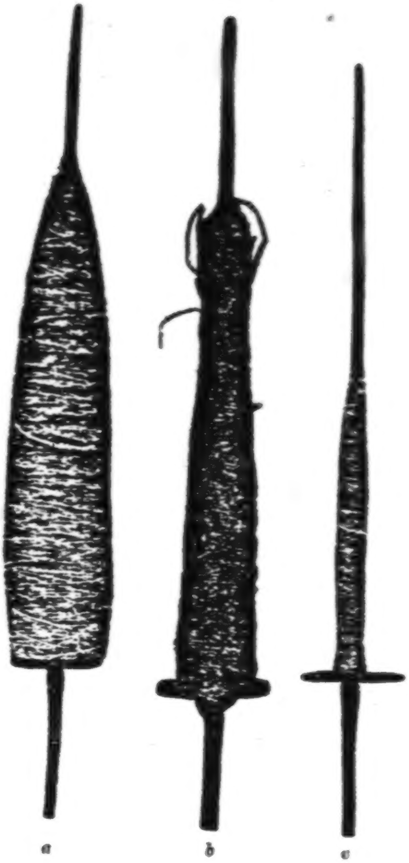

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Fig. 89. a, b, c. Chiriguano spindles of the bakaĩri /Bacairi/ type. Prov.: a, Tasiti; b, Tintapaw; c, Tasiti (upper Pilcomayo). These spindles are provided with a groove in the upper part which allows the thread to be fastened. The whorls of a and b are of terra cotta, that of c of wood. (1/4 nat. size.)

/434 cont./

286 171 The Chiriguano have their loom in common with many tribes of tropical America, and they doubtless were already acquainted with it in Paraguay, at least in a more rudimentary form. In some Chiriguano villages looms of the Inca or Quichua /Quechua/ type, that is to say, horizontal ones, can be seen. The warp is then fastened to a small cord along a piece of wood and the cloth is rolled around as it is produced.

286 294 Headbands and belts are woven with looms of a type similar to the one just described. The warp threads are fastened to a loop of cotton attached to a hut post. As the fabric is made it is rolled around two small sticks or two ears of corn attached to the lower end of the warp (for this type of loom, see Nordenskiöld, 10, Fig. 4, p. 175).

291 301 I am reproducing in Fig. 95[1] a tśumbi headband. These ornaments have now become very rare, and only a few old men still wear them. Our specimen is dyed with natural colors.

291 Every Indian woman who lives outside the influence of the
[178] missions still wears the tipoy, that is, a kind of long sheath which
they fasten on the shoulder nowadays with a safety pin and formerly
[286] /Plate LXXII appears here/ /435/ with a thorn. In olden times
these tipoy were woven by the Indian women on looms of the
Arawak type. They were of cotton and dyed blue-black. /Fig.
[439] 90 appears here./ Today it is almost impossible to find a woman
whose tipoy is not made of chamalote, a kind of cheap cotton cloth
which the Syrians and half-breeds sell at a high price to our Indians.
In the Caipipendí valley /Fig. 91 appears here/ I met two old
women who still kept the tipoy of olden times. They would not
[126] give it up to me for any price. At Carurutí, an old fellow desirous
of striking a good bargain sold me his wife's at a very /436/ high
price in order to buy brandy for himself. It was very necessary
to celebrate Easter fittingly.

[178] The shirts (tiru-kumbaè) which the men formerly sported exist no more except in the memory of the old men.

[1] [See p. 278--Analyst]

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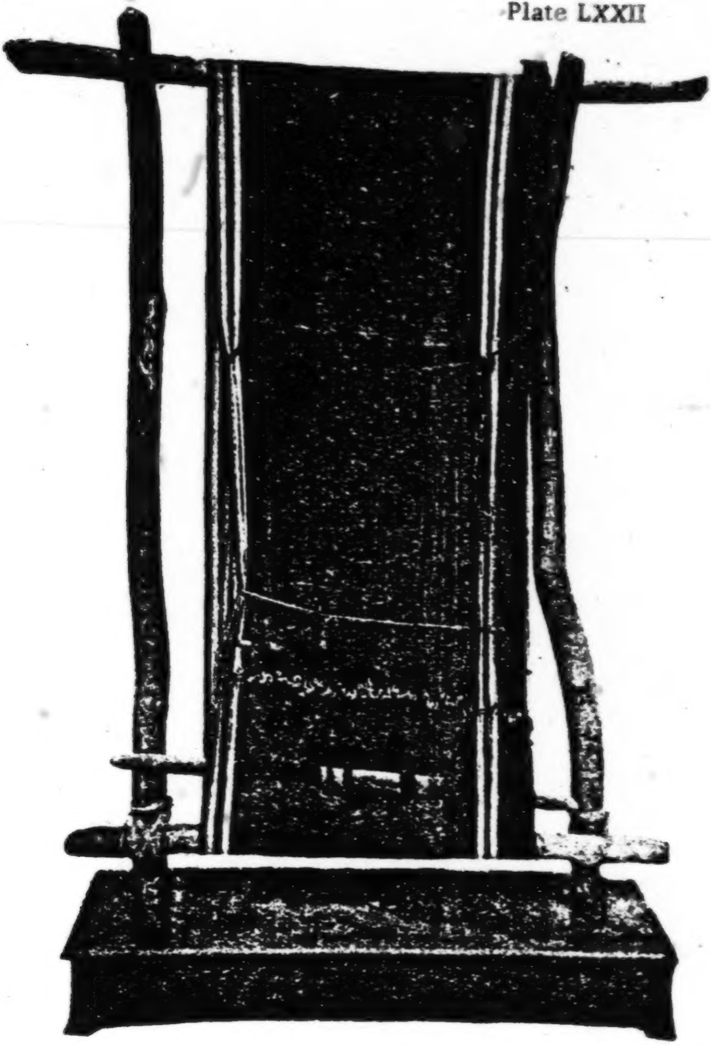
Plate LXXII



Chiriguano loom of the type called "Arawak." Prov.: Ivu.
(1/14 nat. size.)

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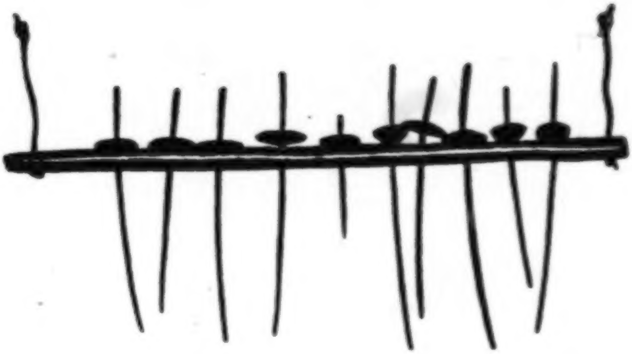

Fig. 90. Drawing indicating how the spindles are arranged inside a Chiriguano hut. They are threaded into the holes made along a bamboo which is hung against the walls of the habitation. (1/9 nat. size.)

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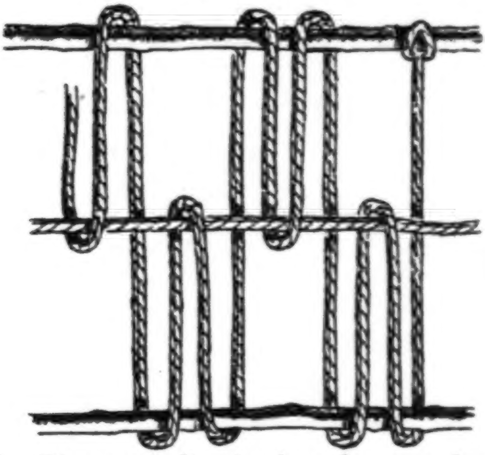

Fig. 91. Diagram indicating how the warp threads are arranged on a Chiriguano loom of the "Arawak type" (from Nordenskiöld).

Modern Quechua SE24

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Modern Chiriguano fabrics show almost no originality. They are generally plain, and, if they present some linear motifs, these are servilely copied from models coming from the Andean region. The Quichua /Quechua/ fabrics, prototypes of those of

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[237]
←

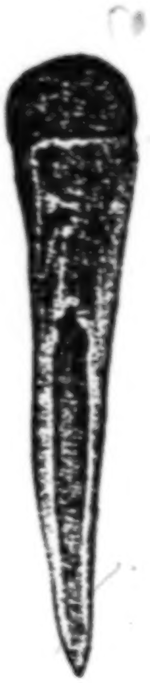
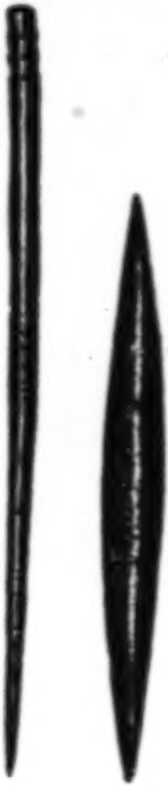


Fig. 92. Metatarsal bone of a mammal, carved in the shape of a dagger, which the Chiriguano women utilize to cross and then tighten the warp threads. Prov.: Ivu. (1/2 nat. size.)



Figs. 93-94. Awls (kiruna) for crossing and then tightening the warp threads. Prov.: Salado Grande. (2/5 nat. size.)

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The Quichua /Quechua/ fabrics, prototypes of those of the Chiriguano, are nevertheless of better quality and greater richness of ornamentation. In addition to purely geometric designs they are often decorated with small figures representing animals or human beings.

Tupi-Guarani SL6
Tupinamba SO9
Guarani SM4
Chane SF8

/436 cont./

000 animals or human beings. There is nothing like that among the
C
286 Chiriguano. The simplicity /437/ of their fabrics forms a striking
531 contrast with the richness and variety of the decoration of their
171 pottery. Their inferiority in this respect is far from corresponding
C to the skillfulness which is their wont in all their activities. It is
286 enough to see the admirable pieces of work executed by little
174 Chiriguano girls in the missions to realize what they would have
857 been capable of if historic traditions had not held them away
T-G from this art. Their distant Tupi-Guarani ancestors were
286 acquainted with only rudimentary forms of weaving, and it can
174 be asserted that /Fig. 95 appears here/ this industry remained
foreign to all the Tupi tribes which did not undergo the influence
T of a nation more civilized than they. The Tupinamba of the
286 Brazilian coast apparently practiced only the double-thread
174 technique (Doppelfadentechnick) by means of which they used
G to make their hammocks. The ancient chroniclers note the use
286 of the tipoy among the ancient Guarani of Paraguay, which is an
[175] indication of the existence of weaving among that subdivision
[291] of the Tupi family. Their present-day descendants, the Kainguá
/Caingua/, could pass for good weavers to judge by the fineness
G of the several fabrics which have been collected among them.
[291] These are for the most part wide belts which they pass between
their legs and knot around their loins. In reality, weaving is in
its beginnings among them, /438/ as is shown by their loom. It
is only a simple frame around which the warp threads are coiled.
The woof is passed through, thread after thread, as in darning.

C No doubt it was the Chané who taught the Chiriguano to weave,
C and as they had probably not reached a /Fig. 96 appears here/
286 very high level in this art, they could only transmit to their
177 successors and suzerains, the Chiriguan, a still little-developed
technique, which the latter have scarcely improved on.

/439 cont./

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191 The contrast between a highly evolved pottery and a still rudimentary art of weaving is characteristic of the Indians of the tropical and subtropical regions of South America, at least for those who can pass for being relatively civilized, such as the Arawak and the Karib /Carib/.

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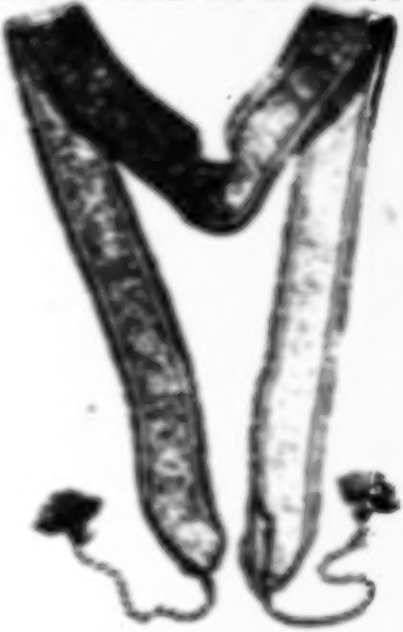

Fig. 85. Headband (tumbi). Prov.: Yumbía. (1/3 nat. size.)

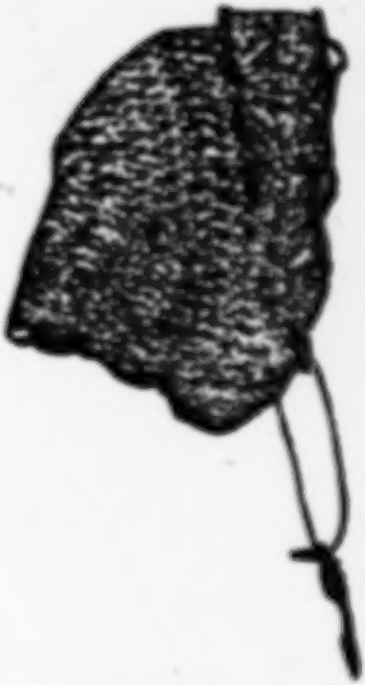

Fig. 96. Knitted wool cap (*ankairu*). Prov.: [114] Ñawirenda. This headdress is a unique piece and it may not be Chiriguano. (1/3 nat. size.)

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Chapter IX

Basketry and Its Techniques

1. General Considerations

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Basketry is far from being as abundantly represented among the Chiriguano and the Chané as among the Indian tribes of the Amazon basin or the Guianas. The secondary role it plays in their industry is due to the nature of the soil where they live and the climate they enjoy. Palm trees with pinnate leaves are lacking, to my knowledge at least, over the whole extent of their territory; as for the ones whose leaves open like fans, if they are numerous in certain places, their occurrence is far from being uniform. The palms which the Chiriguano Indians call karandaí (Copernicia australis) form veritable groves here and there, whereas over vast regions they are lacking or appear only sparsely. I saw a considerable number of them between San Luis and the Saladito River, and I have crossed some large palm groves between Tacuiba and Villamontes, on the Pilcomayo, and south of the Parapití River, going from Cuevo to Pipi. I noted, moreover, that the distribution of the karandaí coincided with that of a certain type of basketry (twilled work /named in English/), for which the Indians use these leaves.

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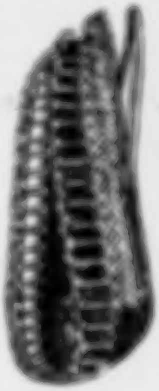

Fig. 97. Back basket used by the Guarayú Indians for transporting heavy loads (from Nordenskiöld).

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Nordenskiöld (11, p. 169) recounts an anecdote which illustrates well the influence the environment exerts on this industry. At the time of one of his trips into the Chaco, the scholar was accompanied by several Guarayú Indians, who followed him as far as Chiriguano country. The Guarayú customarily load their baggage and the products of their fields into back baskets of a special type (see Fig. 97) which have a wide distribution in tropical America, from the Guianas to Paraguay (Nordenskiöld 11, P. 171 and MAP 21).

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p. 171 and Map 22). Their baskets being in bad shape, the Guarayú wanted to make some new ones and were very annoyed not to find in the region into which they had come the palm trees with pinnate leaves which they were in the habit of using for this purpose. Now, Guarayú and Chiriguano are brothers in race and language and emigrated at the same period from Paraguay to settle in the vicinity of the Andes. When leaving their country of origin, both were acquainted with this type of basket used by their ancestors, the Guarani, the Tupinamba of the Brazilian coast, /661/ and still favored among their first cousins from Paraguay, the Kainguá (Métraux, 7, p. 208). The disappearance of this cultural element among the Chiriguano is due solely to the lack of appropriate raw materials.

In order to make up for the absence of back baskets, indispensable to a farming people /Fig. 98 appears here/ the Chiriguano borrowed from their neighbors in the Chaco, either the Mataco or the Choroti, the carrying nets (in Chiriguano *alaguiha*) whose use is so widespread among the latter and is so characteristic of their civilization. Carrying nets today are in general use among the Chiriguano, and in every village each family has at /Fig. 99 appears here/ least one (Figs. 98 and 99).

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[191] In spite of this wide diffusion, the Chiriguano *alaguiha* betrays its origin by its form and technique (see Figs. 100 and 101 /see pp. 282-283/), which are both found in the tribes we have just enumerated (Nordenskiöld, 3, p. 208, Technique I). Although considerably more advanced on the way to civilization than the seminomadic tribes of the Chaco, the Chiriguano do not by any means equal them /662/ in the art of making nets. The *alaguiha* I collected cannot be compared with the deep bags which the Mataco or the Choroti, for example, make for the same purpose. In the village of Machareti, where Toba live with Chiriguano, it is the former who furnish the latter with the /Fig. 100 appears here/ carrying nets they need (see Fig. 99 /see p. 282/) (1).

1. Nordenskiöld (11, p. 163, Fig. 63 A) gives the detail of the technique of a Chiriguano carrying net. This technique is not found on any

[text continued on p. 283]

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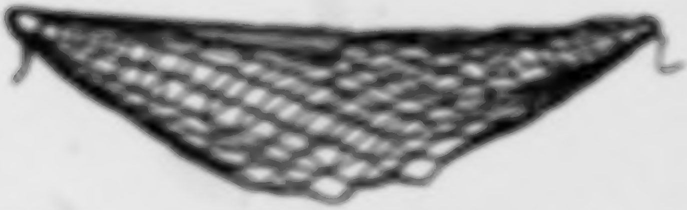

Fig. 58. Carrying net (aliquerica) of the Chiriguano Indians. It is held on the forehead by a strap which is not shown in the photograph. Caraparí. (About 1/10 nat. size.)

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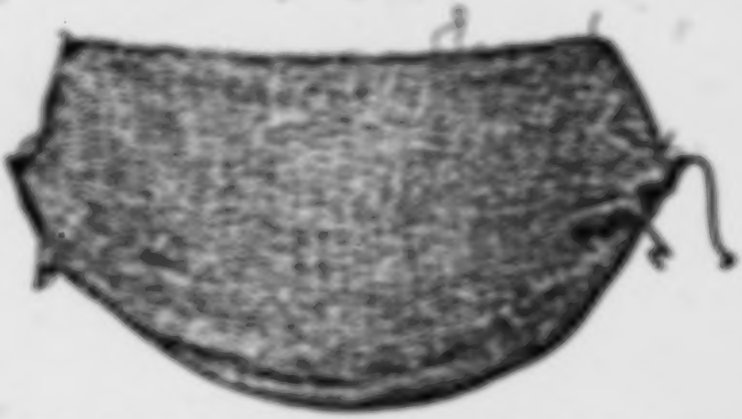

Fig. 59. Toba carrying net used by the Chiriguano Indians of the Macharetí mission. (About 1/10 nat. size.)

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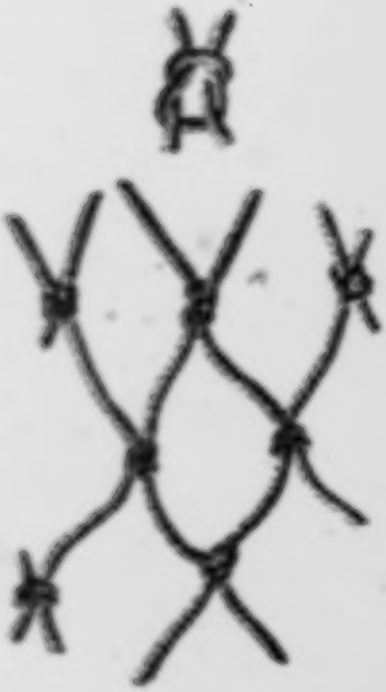

Fig. 100. Technique of the net of Fig. 98 (Technique I, according to Nordenskiöld, 9, p. 204).

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171 /Fn. 1 cont./ of the [illegible] I brought back from the Chaco. I suppose it is a question of a carrying net which the Chiriguano might have bought from Choroti, who, with the Ashluslay and the Mataco, seem to be the only ones to use this technique. The technique we show in Fig. 101 is known to the Ashluslay, the Choroti, and the Tapiete. Nordenskiöld (9, p. 204) does not mention it among the Toba, where it nevertheless exists, as the [illegible] of Fig. 99 testifies.

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174 177 286 482 [439] Everything thus leaves us to suppose that, in the early period of their settling on the western confines of the Bolivian Chaco, the Chiriguano procured by barter the carrying nets intended to replace the back baskets they had used until then. It was only later that they learned to make them themselves, adopting only the simplest and easiest of techniques besides. Thanks to this example we can catch alive the causes which have motivated the adoption of a new cultural element after the disappearance of another which rendered the same services. For that, two factors have come into play, the physical environment and the ethnic one. There was adaptation and borrowing at the same time. This fact also proves that a relatively civilized people never hesitates to appropriate the inventions of more barbaric tribes when they find some advantage in it.

285 17 The present poverty of the basketwork industry among the Chiriguano does not imply that it is insignificant and worthless. Perhaps before the decline of this nation it was more widely represented in each village. I was able to observe that the disappearance of basketwork /442/ went along with the influence of the white men. But, for the reasons I have given above, I do not believe that at any time there could have been found among the Chiriguano that abundance of objects made of basketwork which travelers noted among the Indians of Guiana or the Amazon basin. Formerly, when the ancestors of the Chiriguano were still living in Paraguay and Brazil, they possessed basketwork identical with that of the tribes inhabiting the regions I have alluded to. Proof of it is furnished by the survival among the modern Chiriguano of various types of baskets, fire fans, and sieves, of which we find /Fig. 101 appears here/ the exact equivalent only in Guiana and the Amazon basin. As we shall ascertain in the course of this study, the identity between these two ethnic areas is perfect from this point of view. The only difficulty is to know whether in this case it is a matter of the remains of an industry peculiar to the Chané Indians of Arawak origin, whose influence upon the Chiriguano was considerable, or whether this basketwork only continues that of the ancient Guarani emigrants. In my opinion the question does not need to be asked. The basketwork of the

C /442 cont./ The basketwork of the
285 ancient Guarani or Tupinamba did not differ essentially in technique,
171 form, or processes of ornamentation from the basketwork
174 of the north of southern America (Métraux, 2, pp. 249-255). It must have offered more than one point of similarity with that of the Chané, and we must consider the modern basketwork of the Chiriguano the heir of the basketwork common to these two /443/ nations. Let us notice in passing that the basketwork of the populations of tropical America has a certain unity. Nevertheless,

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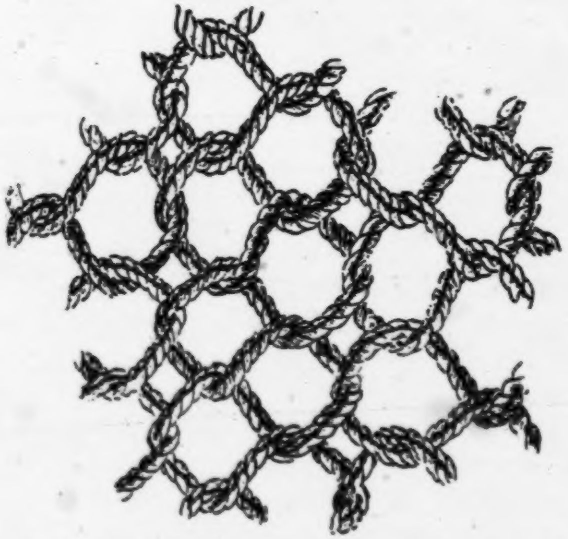

Fig. 101. Technique of the net of Fig. 99 (Technique V, according to Nordenskiöld, 9, p. 208).

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285 it was in the Guianas that it reached perfection.
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174 After their great migration to the foot of the Andes, the Chiriguano seem to have adopted basketwork of a new technique, which doubtless was unknown to their ancestors and racial brothers in Paraguay and Brazil. This technique is characteristic of all the baskets I am putting under the heading of wicker work

Ce /named in English/ in the following pages. As we shall see,
[285] this technique also exists in the Guianas, and it is possible that
[171] it was brought into the Bolivian Chaco by the Arawak nation
[174] of the Chané. The center of dispersion of the Arawak must be
ooo

Ce 101 174 /443 cont./ the center of dispersion of the Arawak must be placed to the north of the Amazon, and before the Chiriguano invasion the Arawak tribe of the Chané was established over the whole extent of the territory now occupied by the former.

C 285 171 Beside this technique another exists, known to the Chiriguano since time immemorial and well before their great migration. The English-language ethnographers give it the name of twilled work. No other type of basketwork is so widespread. This technique is preponderant in all of tropical America from the Antilles to Paraguay and in the south stops at the Chaco. The Chiriguano are the only Indians of the Chaco among whom twilled work is in current use. This type of basketry used to exist on the coast of ancient Peru, but its importance there was not great and it appears only in work baskets.

C 285 184 Basketry in wicker work and that in twined work do not have an identical distribution among the Chiriguano. Baskets of the first kind are numerous in the villages of the upper Pilcomayo (Saladito, Salado Grande and Chico, Ibopeytí, and Yumbia) and go as far as the Ivu mission. They stop, or are rare, in the rest of the Chiriguano country, notably in the Caipipendí valley, where baskets of the second type (twilled work) predominate almost exclusively. These are widespread there, and the beauty of their workmanship, the embellishments with which they are provided, put them well above the basketwork of any other zone and even above that of tribes living in regions richer in palm trees.

C [126] In the huts of the upper Pilcomayo I collected several baskets in twilled work, but they were rare there and often incomplete and torn. I had the impression that they had arrived there by way of commercial exchanges. In any case, the Indians no longer plait baskets of this type, and it is possible that their disappearance has given value to the specimens of them which remain. That would explain the absence of any new specimen and the preservation of ancient baskets almost beyond usefulness. Be that as it may, at present the true center of basketry in twilled work is the Caipipendí valley, and that of the basketry of /444/ wicker work, the region of the upper Pilcomayo. C [178] Since the living conditions of the Chiriguano in the missions north and south of the Pilcomayo have undergone deep modifications, I do not know what the respective

/444 cont./

285 distribution of these two techniques must have been in former times.
184 We shall find this difficulty every time we consider the diffusion
of a cultural element peculiar to these Indians.

285 Wicker work basketry has undergone strong European influence.
177 The agents have been the half-breeds of the department of Tarija,
who live in constant contact with the Chiriguano. This foreign
influence on the baskets belonging to this technique is manifested
by modifications of the original forms and improvements of details, such as horseshoe handles.

285 Among the Chiriguano I did not find a single basket woven
171 with the technique called "in spirals" (coiled basketry /named in
English/), although in olden times it was in use among the Andean
populations who used to and still do live in contact with the
Chiriguano. Basketwork "in spirals" has continued on the altiplano,
as the basket of Fig. 103, which I bought in La Quiaca, proves.

Basketry in "Wicker Work"

285 Mason (p. 228) designates under the name of wicker basketry a type obtained with the following technique: a rigid framework composed of thick, solid elements is intercrossed by thinner, more flexible elements. In the course of this work I shall call warp the rigid elements of the framework, and the ones crossing them, woof. The woof passes alternately over and under each element of the warp. This technique is well known to us: it is that of our wicker baskets, trunks, and back baskets (see Fig. 105 /see p.295 /).

Because of its very simplicity we have a right to suppose that this technique is old. It is only a variety of checker work /named in English/, the most elementary of all the techniques. By checker work we understand the process which consists of interlacing flexible bands so as to obtain a checkerboard design. The only piece of basketry made with this technique that I know of in the region we are concerned with is a basket that Eric von Rosen

/444 cont./

285 (1, Fig. 134, p. 122) obtained from some Choroti who were [114] camping near Tatarenda. I share the opinion of this explorer, who considers this object as of Chiriguano origin.

[171] In spite of its simple and archaic character, basketry in wicker work is rare in South America. According to Nordenskiöld (10, p. 171, and 11, p. 198), it is found among the Araucan, Yurakare, Atsawaka, Tambopata Guarayú (Chama), Yamiaka, and the Indians of Guiana, in particular those of the Roroima region.

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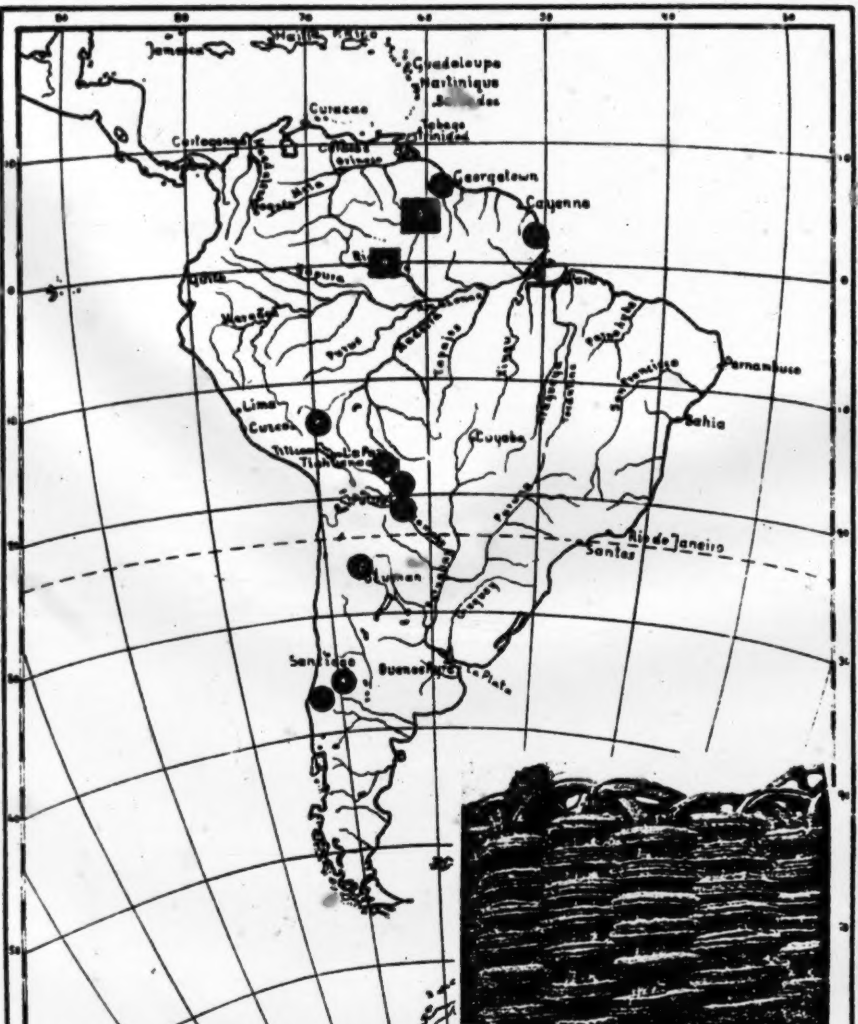
Jamaica
Haiti
Porto Rico
Guadeloupe
Martinique
Barbados
Curacao
Tobago
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Meta
Georgetown
Cayenne
Japura
Quito
Marañon
Purus
Amazonas
Tapajoz
Xingu
Para
Pernambuco
Lima
Cuzco
Titicaca
La Paz
Tiahuanaco
Cuyaba
Bahia
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires
La Plata

Map 1, showing the distribution of the technique called wicker work

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Table for Map 1

Distribution of the basketry technique called "wicker work"

Numbers on the map	Tribes	Authors	Remarks
1	Chiriguano and Chané		
2	Diaguite	Museo de Tucumán No. 305	Some impressions on the base of a vessel enabled me to discover the existence of this technique in this geographical area.
3	Araucan of Chile	Latcham, p. XXXV (1)	
4	Araucan of Argentina	National Museum of Buenos Aires (Palavecino Collection).	
5	Yurakare	Nordenskiöld, 11, Fig. 30, p. 128.	
6	Atsawaka, Tambopata-Guarayú	Nordenskiöld, 11, p. 198.	
7	Palikur	Nimuendajú, Fig. 23, p. 49.	
8	Siusí and Kauá of the Aiary River	Koch-Grünberg, 2, Vol. II, Fig. 142 a-d, p. 221.	
9	Patamona, Makusi, Arekuna	Roth, p. 140, Pl. 105 B and C.	
10	Arawak	Roth, Pl. 104 B.	

[113]

1. Latcham, R. E., "Ethnology of the Araucanos," in The Journal of the Royal Anthropological Institute of Great Britain and Ireland, Vol. 34, London, 1904, cited from Nordenskiöld, 10, p. 171.

/446 cont./

285 171 This information needs to be completed. The technique called wicker work was apparently known to the ancient Diaguite. A vessel from one of the Andean valleys in Tucuman province bears imprinted on its base impressions left by a tray or basket in wicker work, upon which the potter had placed this receptacle when the clay was still soft (Fig. 102). This discovery did not surprise me: already, and for a long time, I had supposed that this manner of plaiting baskets was not foreign to the peoples of the Andes. How otherwise could one explain the occurrence of wicker work among the half-breeds and Indians of Tarija department, the Araucan and Chiriguano Indians of the upper Pilcomayo?

Guiana forms a second area of dispersion of this technique without, however, its being very common there. The small bags in which the Patamona put the cotton with which they provide the arrows of their /447/ blowguns before blowing them are in wicker work, the same as the pegalls with the so-called "armadillo" motifs of the Arawak, Patamona, and Makuši /Macusi/. The baskets in the form of carafes or bottles of the Siusí /Siusi/ and Kauá /Caua/ of the Aiary River are also good examples of this technique. (On the modalities and distribution of this technique, see Roth, p. 140 and Plates 104, 105, and 106, and pp. 329-331.)

The distribution of this technique is wider in North America. It is known to the Indians of eastern Canada and abounds in /Fig. 102 appears here/ southern Mexico and in Central America. It appears scattered here and there on the Pacific Coast and in the interior basin.

Most of the fish weirs, the enclosures for stopping game during hunting drives, and the coarse baskets serving for the transport of numerous objects are made in this technique.

285 323 If one examines the baskets of this type among the Chiriguano, one will doubtless be struck by the fact that several of them assume the form of pottery pieces. This resemblance is further accentuated by the fact that some (see Plate LXXV, 2 /see p. 299/) are provided with lateral handles in imitation of vessels. The interplay between these two industries is evident.

/448/

285 171 172 The horseshoe handles which surmount some of these baskets (Plate LXXV, 1 and 3)[2] seem to me to come from imitation of European or half-breed basketwork. Among the half-breeds of the eastern slopes of the Andes I found baskets which had exact replicas among the Chiriguano (see, for example, Fig. 108 /see p. 302 /) and attested eloquently to the borrowing of the latter.

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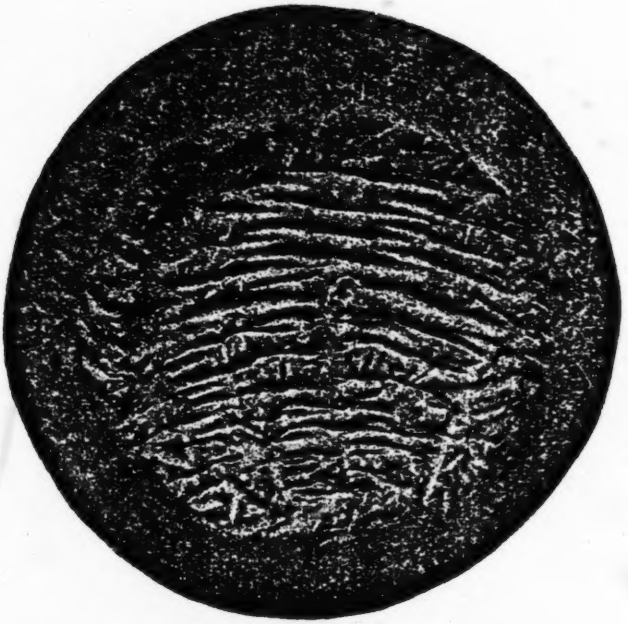

Fig. 102. Base of a vessel from the mountainous region of Tucumán Province, and bearing the impressions of a tray or basket in wicker work, on which it rested during its manufacture.

Besides, the Chiriguano give the Spanish name of canastos to baskets of European form /Fig. 103 appears here./

Among the baskets in wicker work there are some (Plate LXXV, 4) which in form and technique are singularly reminiscent of the baskets of Brazilian Guiana which Koch-Grünberg (2, Vol. II, p. 221, Fig. 242 a, b, c) compares to carafes. (Cf. also Roth, Plate 104, Fig. C.)

[2] [See p. 299--Analyst]

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Description of baskets in "wicker work"

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Figure 104. Length, 20 centimeters; width, 14 centimeters; height, 14.5 centimeters. Provenance: Ibopeyti (upper Pilcomayo region).

This little basket was made by the technique called wicker work, that is, the woody stems constituting it were intermingled in [415] → such a way that the elements of the woof pass alternately above and below those of the warp. There are ten of the latter: four go in the transverse direction and six in the longitudinal. They are crossed over and held by the stalks of the woof. Plate LXXIII gives a very exact idea of the technique I have just tried to define.

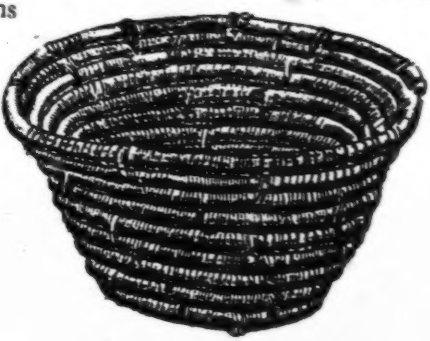

Fig. 103. Small basket in spiral basketry (coiled basketry). Bought at La Quiaca. (2/3 nat. size.)

The fibrous stalks which constituted the warp and went far beyong the rim of the basket were bent back in an arc and fastened into the fabric. They were slipped into it beside another element of the warp after /449/ crossing the neighboring element (see Fig. 105 /see p.295 /). Because of this, the little sides of the basket seen in Figs. 104 and 105 seem to be formed by a warp of which each element is double. The rim is regular and strong.

The basket is provided with a suspension cord of vegetable fibers. I do not know the scientific or common name of the plant from which the stalks used in the plaiting of this basket were taken. They are flat, regular, and rectangular in cross-section.

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285 Nordenskiöld (10, Fig. 53 B) published a basket of analogous shape and identical technique.

Plate LXXIV, Figure 1.[2] Height, 16 centimeters; maximum diameter, 14 centimeters. Provenance: Saladito (upper Pilcomayo).

The warp is composed of 12 elements crossing one another at the base in the shape of a quadrilateral, that is, in groups of three (see Plate LXXVI, 1 /see p.300 /). The woof, like the warp, is made of fibrous, flat, thin strips. The ends of the warp which passed beyond the rim have been folded back and slipped into the fabric.

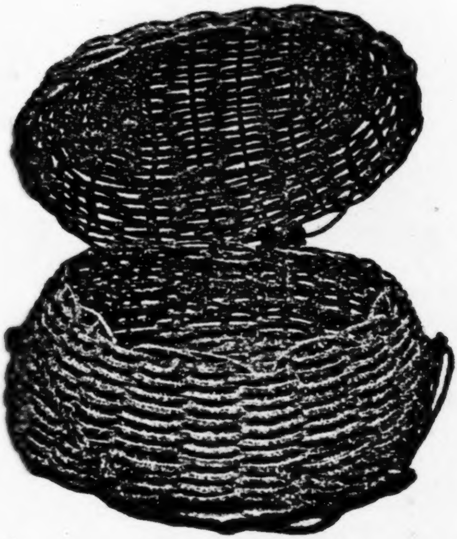

Fig. 104. Basket in wicker work with cover. Prov.: Ibopeytí. (1/3.5 nat. size.)

Plate LXXIV, Figure 2. Height, 16 centimeters; maximum diameter, 18 centimeters. Provenance: Ivu.

The technique of this basket is identical with that of the preceding specimen. Only the raw material is different. The tigellas composing it are very thin and lend themselves less well to regularity of the /450/ fabric. For this reason the elements of

[2] [See p. 298--Analyst)

/450 cont./

285 the warp are double. It is composed of 32 tigellas arranged in pairs, which, in reality, gives 16 elements. They cross at the base, forming an octagon somewhat like Plate LXXVI, 2.

Plate LXXIV, Figure 3. Height, 13.5 centimeters; diameter, 11 centimeters. Provenance: Ivu.

The framework of this basket is made of uneven, coarse stalks. The base is composed of fine, close-woven tigellas. Some stalks of the warp have been split, then spread to form two distinct elements (see Fig. 106 /see p.301 /).

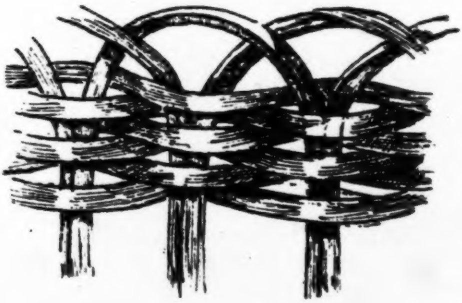

Fig. 105. Detail of the technique of the rim of the basket of Figure 104.

Plate LXXIV, Figure 4. Height, 13.5 centimeters; diameter, 11 centimeters. Provenance: Tintapaw (Alto Pilcomayo).

This basket is identical with the one we have just described, except that the rough and brittle stalks make a thick, coarse fabric.

Plate LXXV, Figure 1.[1] Height, 19 centimeters; diameter, 18 centimeters. Provenance: Timboy (region of the Saladito River).

This basket differs from the preceding ones only by the shape of the horseshoe handle surmounting it. This is composed of twisted fibers exactly as in our household baskets. There are 12 warp elements, arranged in groups of three, radiating from the base and forming a quadrangular figure as in Plate LXXVI, 1.[2] Some stalks of the woof have been dyed pink.

[1] [See P.299--Analyst]

[2] [See P. 300--Analyst]

/450 cont./

285 Plate LXXV, Figure 2. Height, 16 centimeters; maximum diameter, 17.5 centimeters. Provenance: Ibopeyti (upper Pilcomayo).

This basket deserves a place apart by virtue of its general shape, the handles it has, and the care with which it was plaited.

The handles with which it is provided are formed by an element of the woof which, after making the round of the warp, takes off from it to pass three times, perpendicularly, under the framework of the basket. /Plates LXXIII-LXXVI appear here./

/451/ The handle thus obtained is reinforced by a supplementary tigella which laces among the elements just as the woof does (see Fig. 107 /see p.301 /). Plate /Fig. 106 appears here/ LXXVI, 2, shows us the fashion in which the basket-maker proceeded in order to group the warp elements, which are 15 in number.

Plate LXXV, Figure 3. /Fig. 107 appears here./ Height, 16 centimeters; maximum diameter, 15 centimeters. Provenance: Ñawirenda (mouth of the Salado River).

The framework is composed of flat, brittle stalks always going in groups of two. The added handle is made of twisted fibers. [177] The general form of this basket betrays European influence.

Plate LXXV, Figure 4. Height, 15 centimeters; diameter, 12 centimeters. Provenance: Ñawirenda (mouth of the Salado River).

The warp is formed of flat, thin elements wider than those of the woof. The handles /452/ are added on. They are formed by a stalk coiled on itself and passing three times under the woof elements. One stalk interlaces there exactly as the woof interlaces with the warp. /Fig. 108 appears here./

Plate LXXVII, Figure 1.[2] Height, 8 centimeters; diameter, 16 centimeters. Provenance: Ibopeytí (upper Pilcomayo). /Fig. 109 appears here./

This little, slightly rounded basket is remarkable for its rigidity and strength. The technique is still the same as we have examined thus far. The warp is composed of 15 elements arranged at the base exactly as on Plate LXXVI, 1.

Plate LXXVII, Figure 2. Height, 9 centimeters; width, 11 centimeters. Provenance: Tintapaw (mouth of the Salado River, upper Pilcomayo).

[2] [See p. 304-- Analyst]

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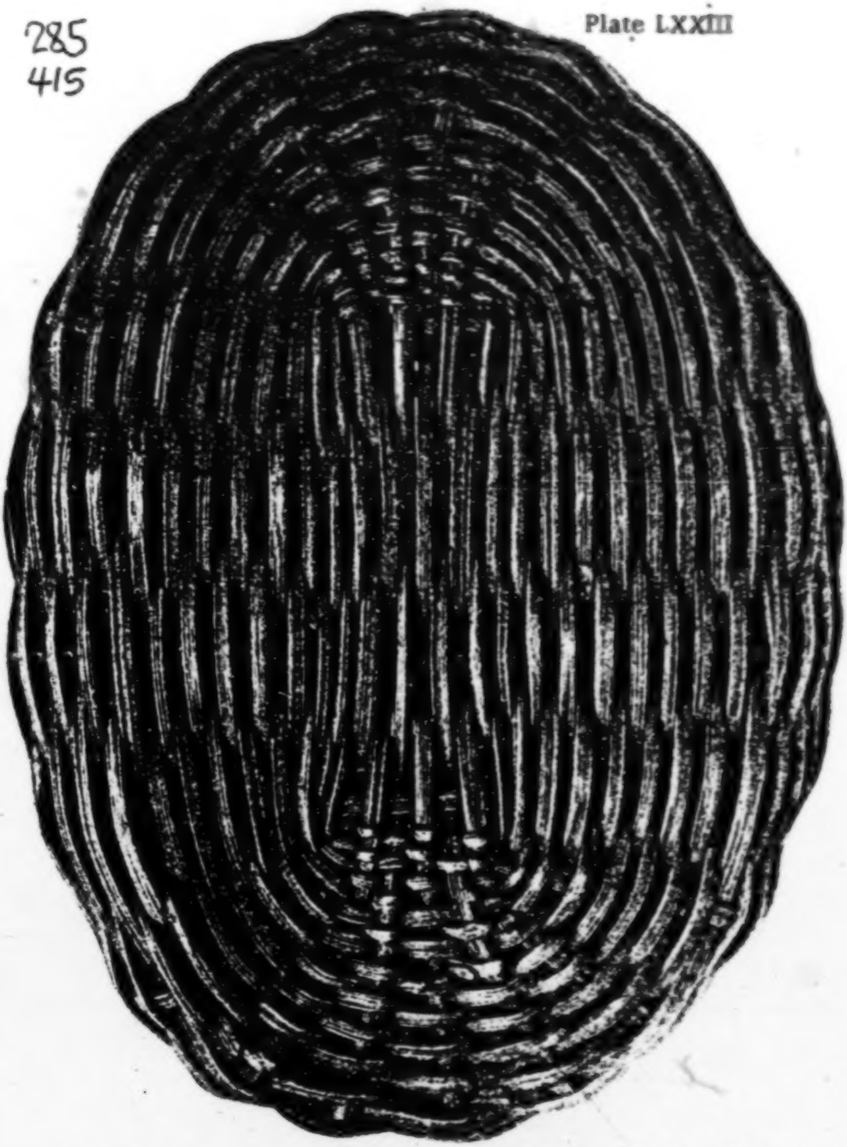
Plate LXXIII



Base of the basket of Fig. 104, indicating the detail of its technique.

Plate LXXIV

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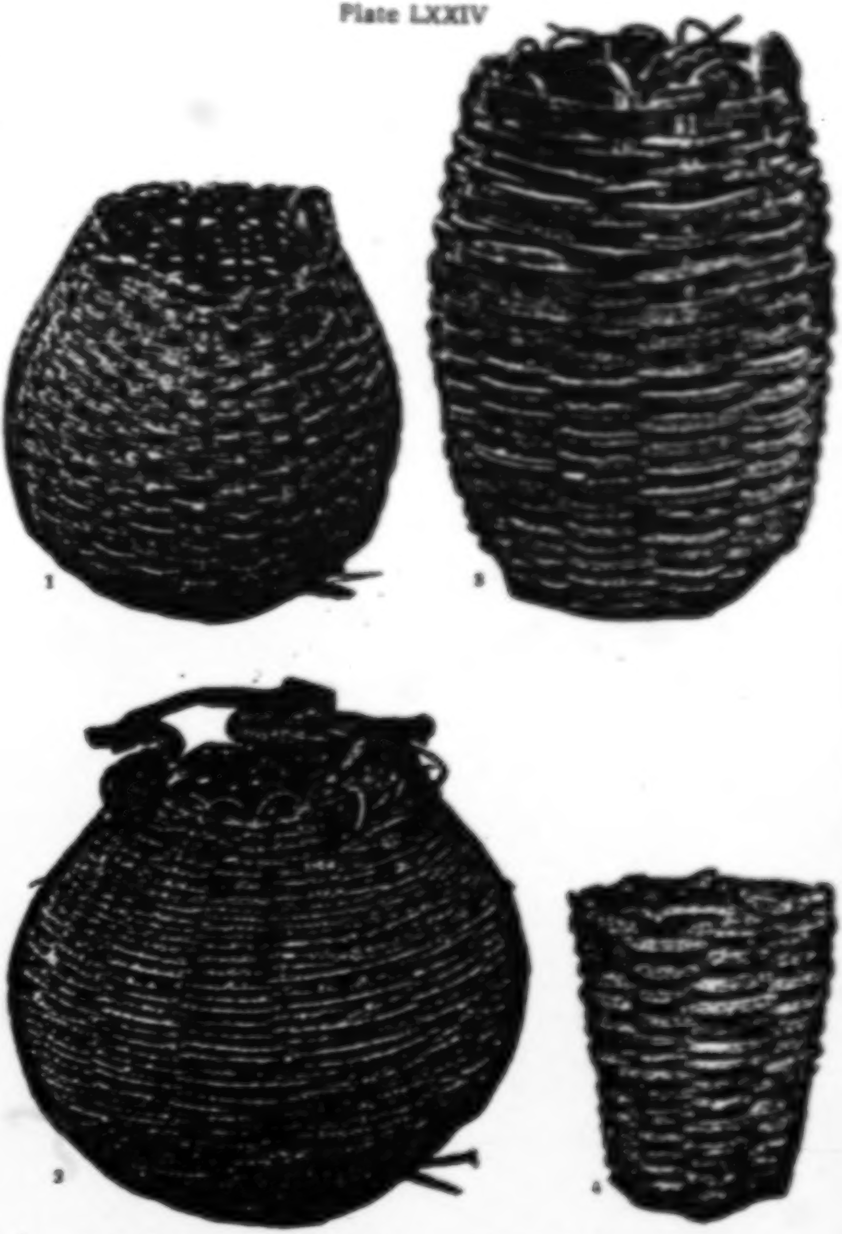

Chiriguano baskets in wicker work. Prov.: 1. Saladito (upper Pilcomayo); 2 and 3, Ivu; 4, Tintapaw (upper Pilcomayo). (About 1/2 nat. size.)

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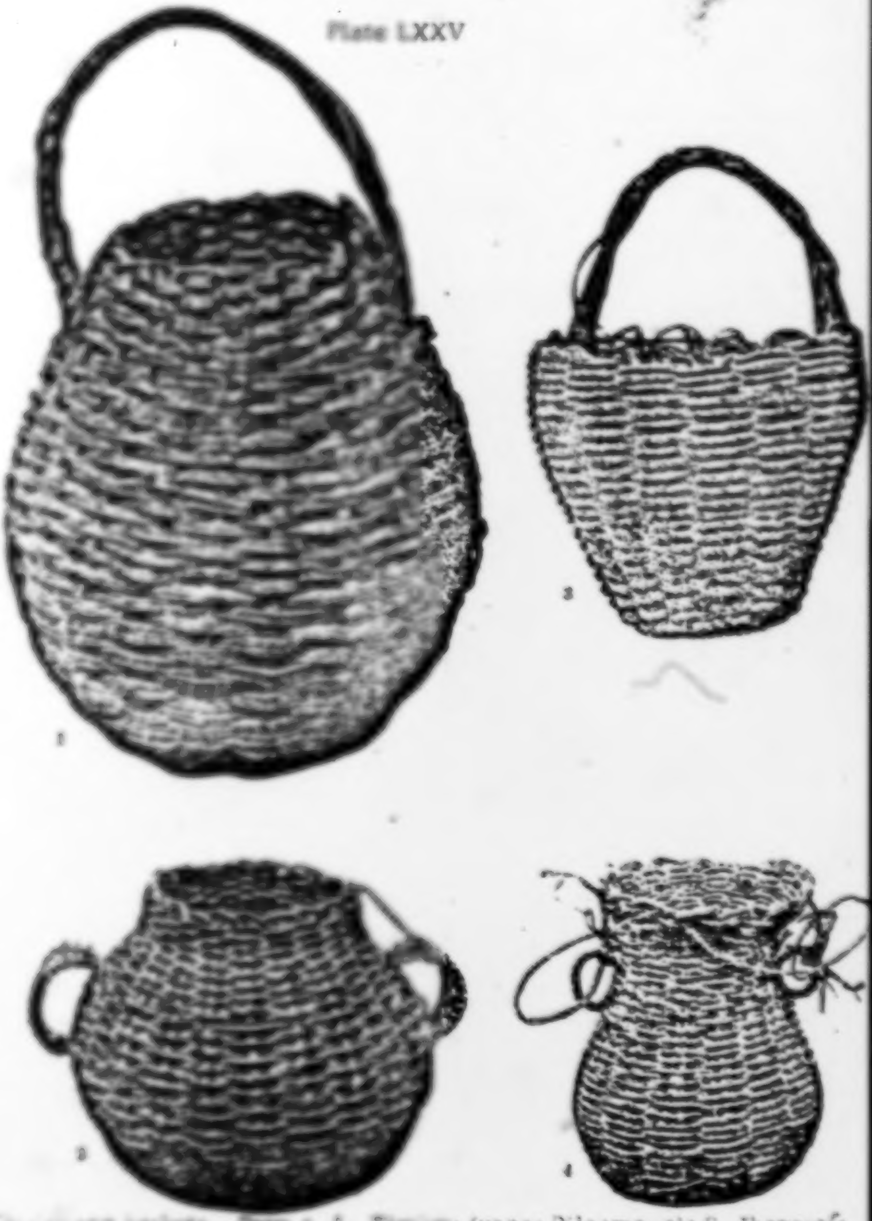
Plate LXXV



Chiriguano baskets. Prov.: 1. Timboy (upper Pilcomayo); 2. Ibopeytí; 3. Ñaurenda (upper Pilcomayo). (About 1/3 nat. size.)

Plate LXXVI

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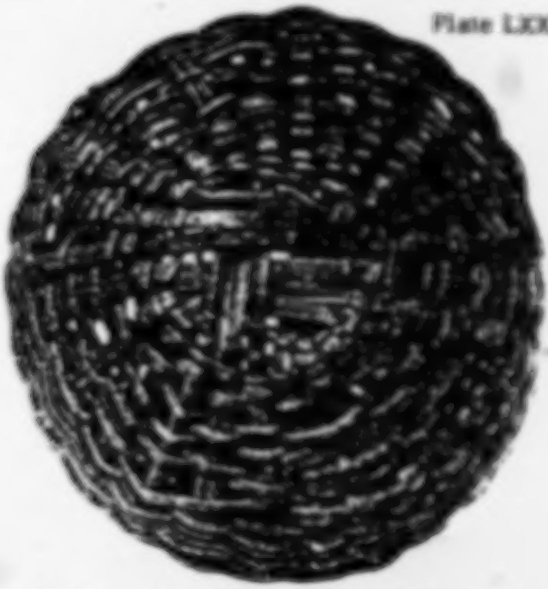
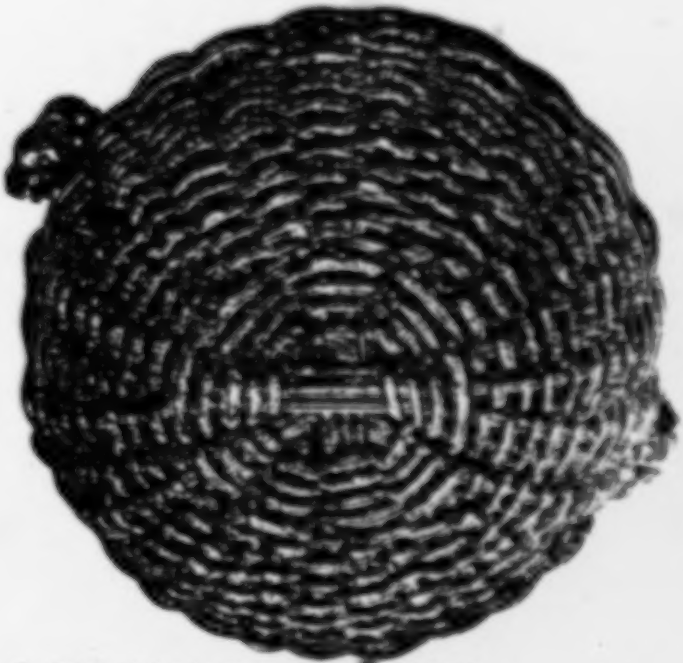


1. Base of the basket of Plate LXXIV, 1.



2. Base of the basket of Plate LXXV, 2.

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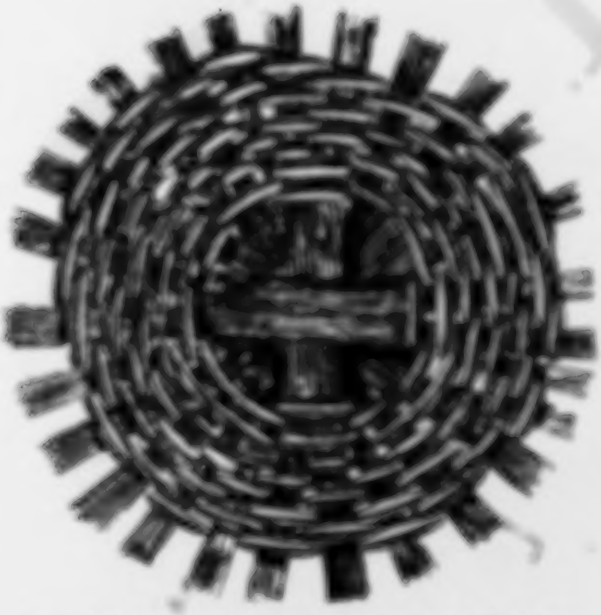

Fig. 106. Detail of the technique of the bottom of of the basket of Plate LXXIV, 5.

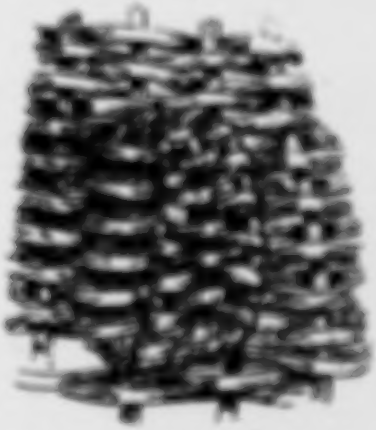

Fig. 107. Detail of the handle of the basket of Plate LXXIV, 7.

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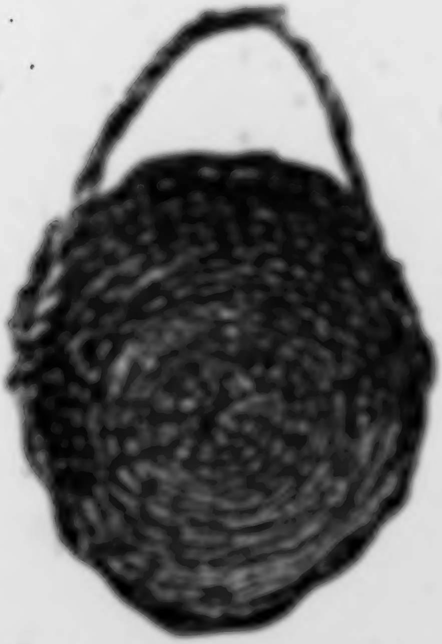
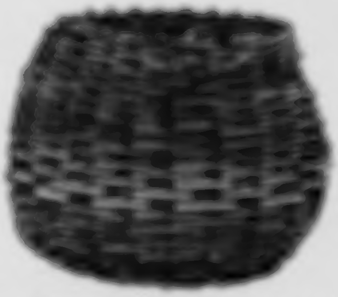


Fig. 154. Basket in wicker work in imitation of those of the half-breeds. Prov.? Inv.
(About 1/4 nat. size.)



[524]

Fig. 155. Miniature basket (child's toy).
(Nat. size.)

/p.63 cont./

285 This small basket is closely related to the preceding one in its technique. The warp is made of four fibrous bands which cross in octagons and are then divided into three /Plate LXXVII appears here/ /p.64/ or two diverging elements which form the warp (see Fig. 108 /see p. 301/).

Figure 110. Height, 15 centimeters; maximum diameter, 35 centimeters. Provenance Ivo.

[191] There is no doubt that this basket is a pure and simple imitation of European ones. I have seen baskets identical from the point of view of form and technique among the half-breeds of the department of Tarija.

b. Basketry in "Twilled Work"

The term twilled work designates the basketry technique in which the woof elements pass over two or several elements of the warp so as to produce with the contexture of the fabric diagonal motifs and an infinity of others all based on the changes of rhythm in the number of the warp elements which have been stepped over (Mason, p. 226).

285 191 In the pages where I dealt with wicker work I have already had occasion to note the affinities which not only the technique but even the form of Chiriguano baskets offer with those from Guiana. The analogy is still more striking with twilled baskets. We have among the Chiriguano the exact counterpart of the famous telescope baskets or pegall of Guiana. These are rectangular baskets in two parts, one fitting into the other and shutting hermetically (Plates LXXVIII, LXXIX, and Figs. 110 and 111). Nordenskiöld (11, p. 179) has given us a map indicating the distribution of baskets provided with a cover into which they fit more or less completely. These "telescope" baskets are particularly abundant north of the Amazon. I suspect that the famous [illegible] of the Tupinamba, in which the latter put their feathers, must have belonged to this type. Among the Tupi-Guarani, the only ones where this type of closure has been noted are the Guarayú, Pauserna, Mondé /Monde/, and Oyampi (Métraux, 1, p. 233).

[[See pp 301 + 302 respectively -- [illegible]]]

[illegible] Métraux--304 E-3 (1930) 1930 SF10 Chiriguano SF10

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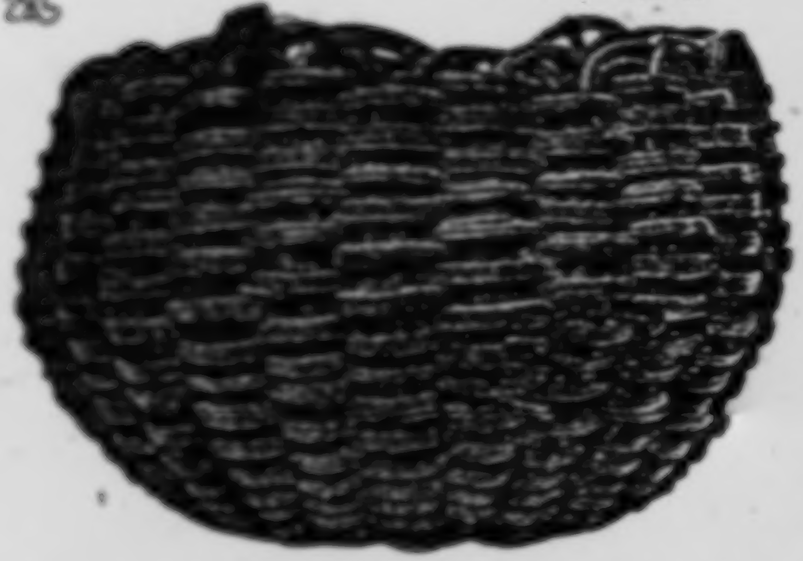
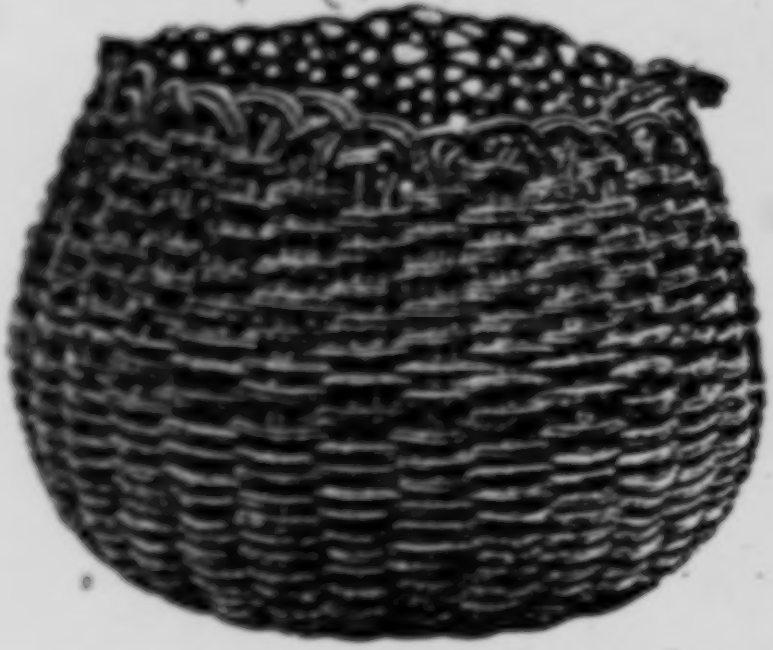
Plate LXXVII





Chiriguano baskets in wicker work. Prov.: 1. Ibopeytí (upper Pilcomayo); 2. Timtapaw (upper Pilcomayo). (4/5 nat. size.)

/453 cont./

285 [531] [171] Another point of contact between the basketry of the Chiriguano and that of the Indians of the east and north of South America is the occurrence of baskets in twilled work in which elements of two colors are combined, following a changing rhythm, to produce geometric figures. The basket of Plate LXXVIII, with the frets standing out in black on the sides, is representative of this form of art, which, in the Guianas, shone with a lively brilliance.

Baskets of the pegall or "telescope" type are divided into two categories according to the principle of their plaiting. To make one kind (Plate LXXIX[I] and Fig. 111), the basket-maker began by crossing the warp elements with one another in such a way that they radiate from a single center. Then he interlaced according to a binary rhythm the tigellas which /454/ left the common center like so many rays. Baskets of the second category have been plaited by intermingling the elements of the warp and woof at right angles so as to make the bottom without any precise point from which the elements come away (Plate LXXX, 2). The photographs (Plates LXXIX and LXXX, 2) show what I mean better than any description.

[824] The stalks which serve for the fabrication of baskets in twilled work are taken from the leaves of the karandaí palm (Copernicia cerifera Mart. or Copernicia australis). The leaves are cut into fine strips and softened by immersion.

Sieves and fire fans belong in the basketry called twilled, but I shall deal with them in a separate chapter.

Description of baskets in "twilled work"

Plate LXXVIII, Figures 1 and 2. Height, 7 centimeters; diameter, 17.5 centimeters. Provenance: Caipipendí.

This basket belongs to the category of those called "telescopes" or /Fig. 110 appears here/ pegall of Guiana. Plate LXXIX which shows us the detail of its upper surface also indicates its technique with sufficient clarity so that no diagram is necessary. The warp is composed of 32 flexible elements radiating from a common center. They begin by interlacing for two rounds; then,

[I] [See P. 308--Analyst]

/454 cont./

285 the basket-maker having introduced black-colored strips into the fabric, these in turn go to cross /Plates LXXVIII-LXXX appear here/ /455/ the first and permit obtaining the figures seen in Plate LXXVIII, 1 and 2.

Figure 110. Height, 14 centimeters; diameter, 35 centimeters. Provenance: Caipipendí. /Fig. 111 appears here./

This large basket is exactly like the preceding one from a technical and decorative point of view. Unfortunately, the dark strips are scarcely distinguishable from the others, whether their color has been rubbed off or whether they have always been thus. The detail of one of the sides is represented on Plate LXXXI, 1. /Fig. 112 appears here./

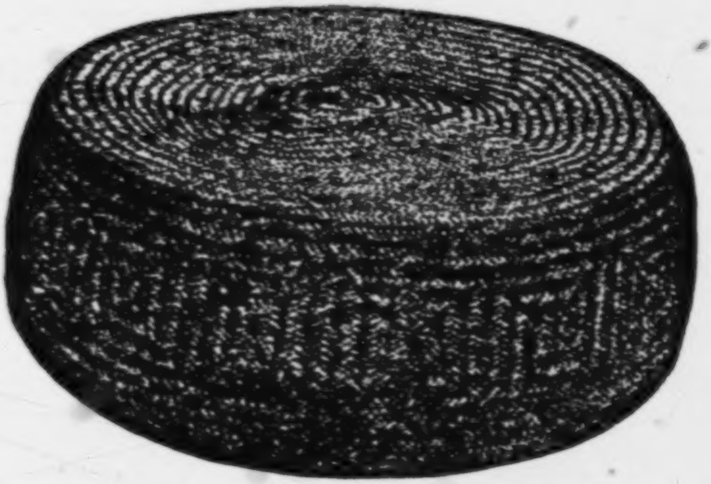


Fig. 110. Circular basket in twilled work. Prov.: Caipipendí. (About 1/3.5 nat. size.)

Figure 111. Height, 9 centimeters; width, 12 centimeters. Provenance: Carurutí.

This basket goes in the same category as those we have just examined, except that it does not show any motif originating from an interlacing of dark and light stalks.

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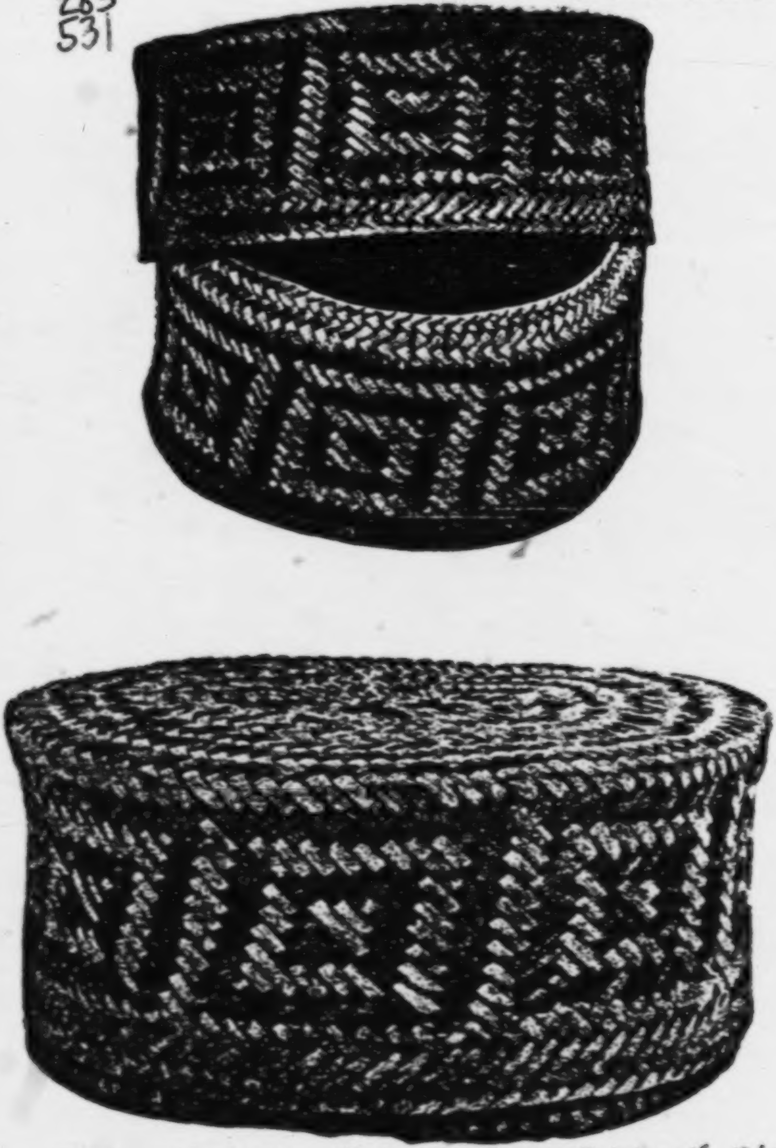
Plate LXXVIII



Chiriguano basket in twilled work. Prov.: Caipipendí. (2/3 nat. size.)

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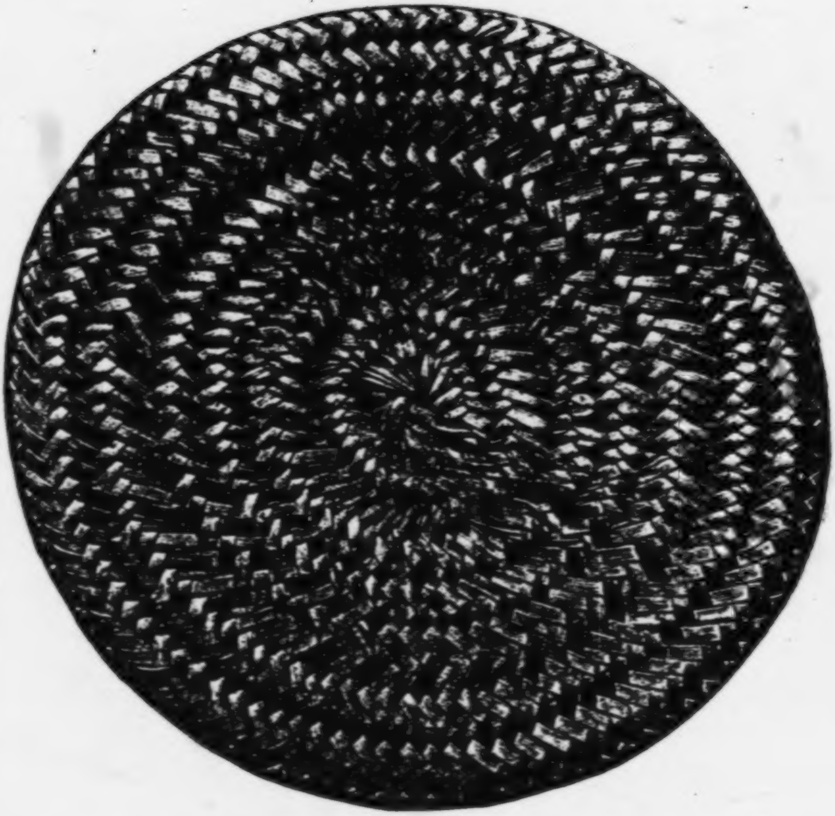
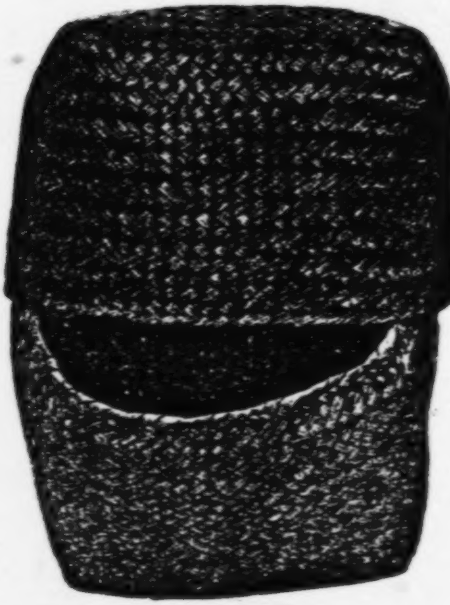
Plate LXXIX

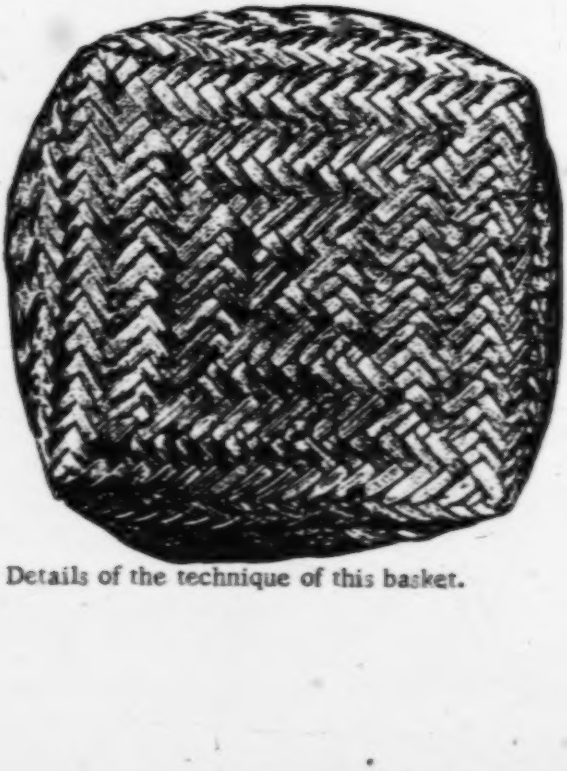


Bottom of the basket of Plate LXXVIII.

Plate LXXX



1. Basket of the telescope type in twilled work.
Prov.: Caipipendí.



2. Details of the technique of this basket.

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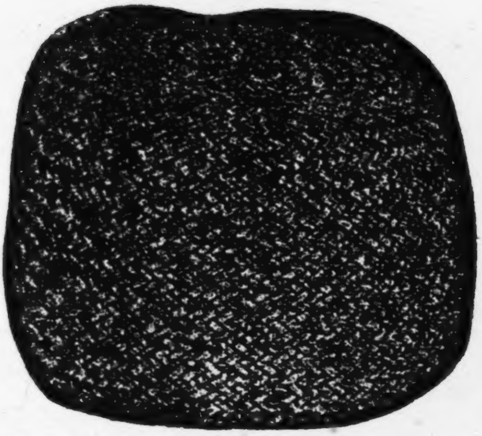

Fig. 111. Circular basket of the "telescope" type in twilled work. Prov.: Caipipendí. (About 1/2 nat. size.)

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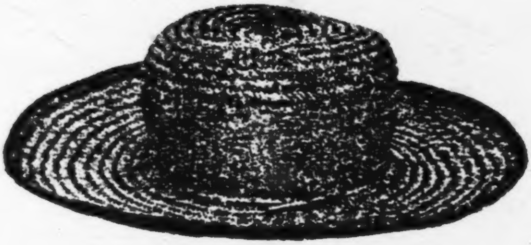
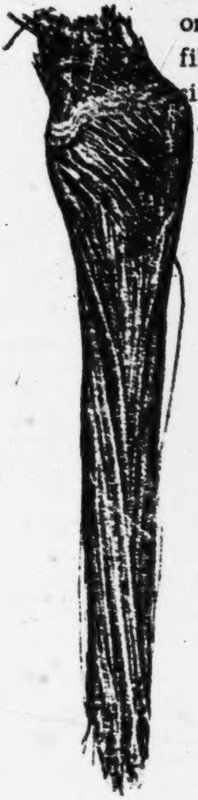


Fig. 112. Hat in twilled work. Prov.: Carurutí. (About 1/5 nat. size.)

/456/

285 Plate LXXX, Figures 1 and 2. Height, 8 centimeters; width, 12 centimeters. Provenance: Carurutí.

The fine strips of palm leaves which make up this basket are wider and more brittle than the ones constituting the preceding one of identical shape but different technique. The fibers, instead of radiating from a single center, simply cross, following the rhythm which Figure 2 of the same plate permits examining.



[276] →

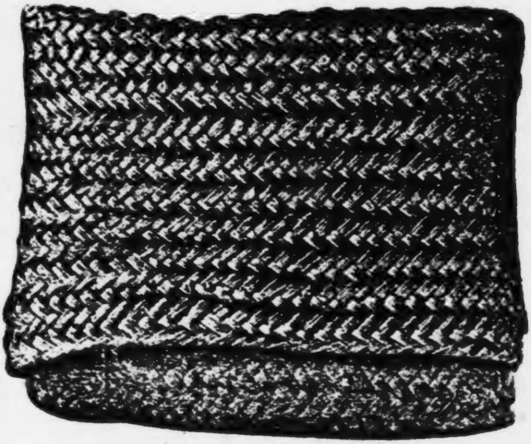


Fig. 114. Chiriguano cigarette case in twilled work. Prov.: Carurutí. (2/3 nat. size.)

Fig. 113. Hat of the type of Figure 112 in the process of being made. (About 1/6 nat. size.)

[291]
[294]
←

Figure 112. Height, 10 centimeters; diameter, 36 centimeters. Provenance: Carurutí.

This hat is made exactly according to the technique of the baskets of Plate LXXVIII and Figs. 110 and 111.

/456 cont./

285 294. A half-finished hat (Fig. 113) which I was able to acquire at Caruruti shows well the process of fabrication. The basketmaker begins by making the crown of the hat, interlacing 36 tigellas and shortly afterward adding other supplementary stalks whose ends are seen protruding. When the hat is finished, all those projecting beyond the fabric are cut off. The rhythm of the crossing elements is twofold.

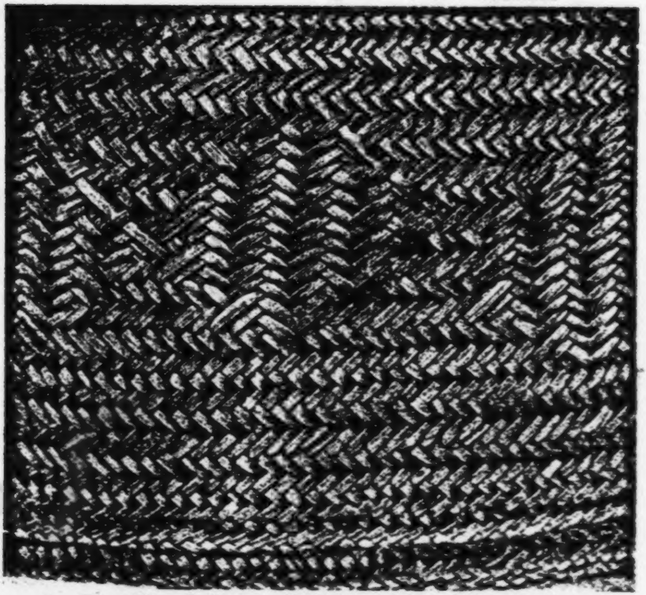
285 276. Figure 114. Length, 10 centimeters; width, 8 centimeters. Provenance: Carurutí.

This cigarette case faithfully imitates the ones the Chiriguano have seen in the hands of half-breeds or creoles. Nevertheless, its technique is interesting, for it is purely indigenous. The /Plate LXXXI appears here/ /457/ tigellas of karandaí leaves cross in a twofold rhythm.

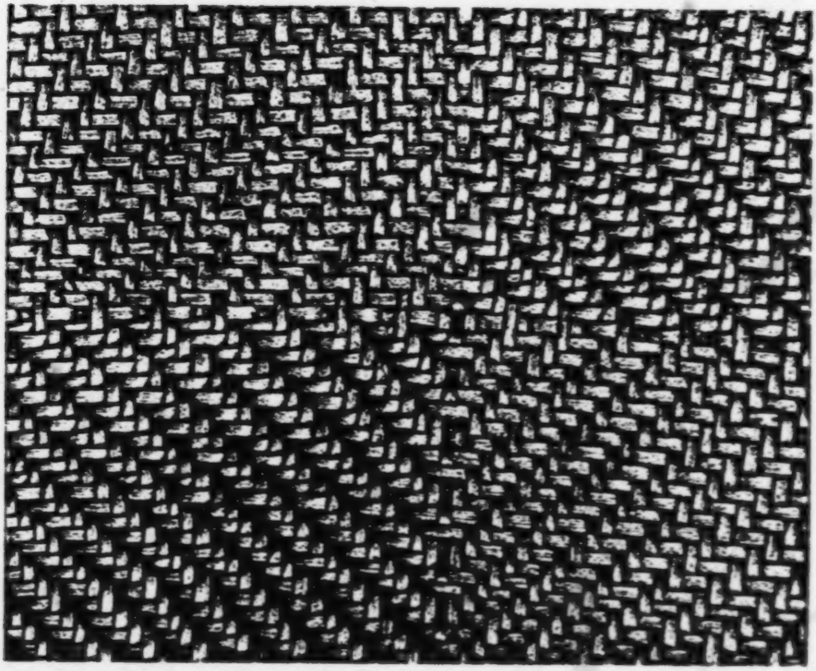
The Chiriguano are not great smokers and it is rare to find cigarettes among them, so that these cases seem to me to be made for amusement rather than for their practical utility.

Sieves

415 252 There is no Chiriguano housewife who does not have at her disposal at least two sieves. The importance of this kitchen utensil corresponds to the considerable role of corn [262] flour in their food. Of the 12 different dishes that the Chiriguano prepare from this grain, there are six or seven in which it appears in the form of flour. Kãwi itself is made with corn pounded in a mortar and then passed through a sieve. Sieves serve also for cleaning beans and ridding them of the stones and dust accompanying them. Finally, sieves are used for straining kãwi after cooking and for separating the liquid, which is to ferment, from the marc or temišu. They can also be used as simple baskets, and I have seen some holding cotton seeds.



1. Details of the technique of the basket of Figure 110.



2. Details of the technique of the sieve of Plate LXXXII.

/457 cont./

C 415 285 Sieves are of two kinds. The first category includes those whose meshes are close together and composed of fine strips of karandaí leaves intercrossing in a binary rhythm. Sieves of this type belong in the basketwork called twilled. The Chiriguano give them the name of urumpé and use them in preference to the others, whose usage is limited.

The second category includes sieves with wide meshes. The strips forming them cross in checkerwork, that is, the woof passes alternately under, then over, an element of the warp. The Chiriguano designate sieves of this type by the name of urumpesa, and they use them for sifting ground corn when they wish to obtain a coarse flour.

C G 415 285 171 Some of these sieves are real works of art, but they cannot be compared with the magnificent specimens from Guiana, on which the alternation of the black and white elements produce geometric figures of the handsomest effect. It is probable that formerly the Chiriguano had identical sieves, as can be supposed from the one on Plate LXXXII, which is composed of a warp and a woof whose gray and white elements are arranged in such a way as to form dark and light bands on which concentric squares stand out.

C 415 171 The sieve is widespread in all of tropical America, where it is used not only for corn flour but also for that which the natives make from bitter manioc. It is unknown to the primitive populations of the Chaco, who have not even felt the need to borrow it from the Chiriguano or Chané. The populations of the Inca Empire /458/ did not know its use. The urumpé is a utensil common to nearly all the Tupi-Guarani tribes; it has been described or noted among the Tupinamba, the Guarani, the Kainguá /Caingua/, the Guarayú, the Pauserna, the Apiaká /Apiaca/, and the Parintintin. C [174] The Chiriguano must therefore have taken along with them when they emigrated from Paraguay, which does not exclude the fact that they may also have found it in use among the Chané.

/458 cont./

285 I was present at the making of a sieve at Carurutí in the Caipipendí valley. Here is what I noted about it: "The raw
[824] material is furnished by the leaves of the karandaí palm (Copernicia australis), which is cut into fine strips. The plaiting is done very simply: they form a square by crossing at right angles the elements of the woof and warp, following the rhythm of 1 (one element over, the other under, etc.) In order to slip in the woof elements, it suffices to raise each time all the strips

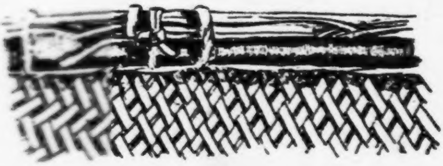


Fig. 115. Detail of the rim of the sieve of Plate LXXXIV, 2.

of the warp which have already been crossed by the woof. When the sieve is plaited, they choose a straight, flexible branch and carefully split it in two. Each of the two halves is bent into a circle so that one of the hoops can fit into the other. The unplaited elements of the warp and woof are inserted between the two hoops (see Fig. 115), then securely tied. Since the hoops have a diameter a little smaller than the width of the woven square, the result is that when it is fastened into the circle, it bulges out. All the ends which stick out are cut off."

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283 The string used to attach the sieve to the hoops is made in the following manner: "The bark of a tree (embira) is taken off in wide, long strips, in turn divided into finer lengths. They take two of these lengths, moisten them with saliva, and roll them on the right calf, each one separately, then the two together. When the cord must be of a certain length, they have to add new pieces. These splices must be made without changing the diameter of the cord and without any gaps. For that they are always careful

/458 cont./

285 to roll together two strands of unequal length. When one of them
283 has been rolled to the end, another is added. Any possibility of breaking is thus avoided. The movement of the hand is downward when they form a strand, and upward and downward when they roll the strands together to make the cord. The cord, at first fine, grows thicker, but slowly."

285 Plate LXXXII. Diameter: 43 centimeters. Provenance: Igüembé valley.

/Plate LXXXII appears here./

/459/ This urumpé is a remarkable specimen from every point of view. The elements composing it cross according to a binary rhythm, that is, each element of the woof passes under or over two elements of the warp. Darker stalks alternate by sections with lighter ones and form gray and light-colored bands which run parallel and cross at right angles.

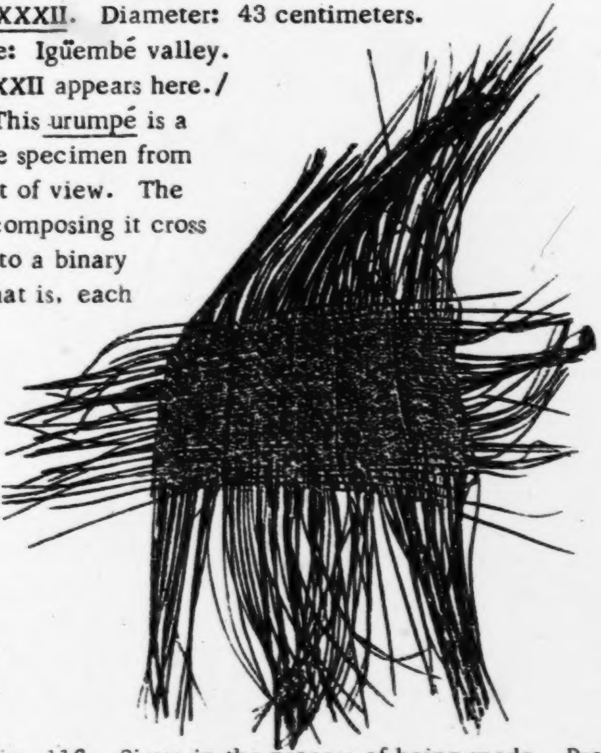
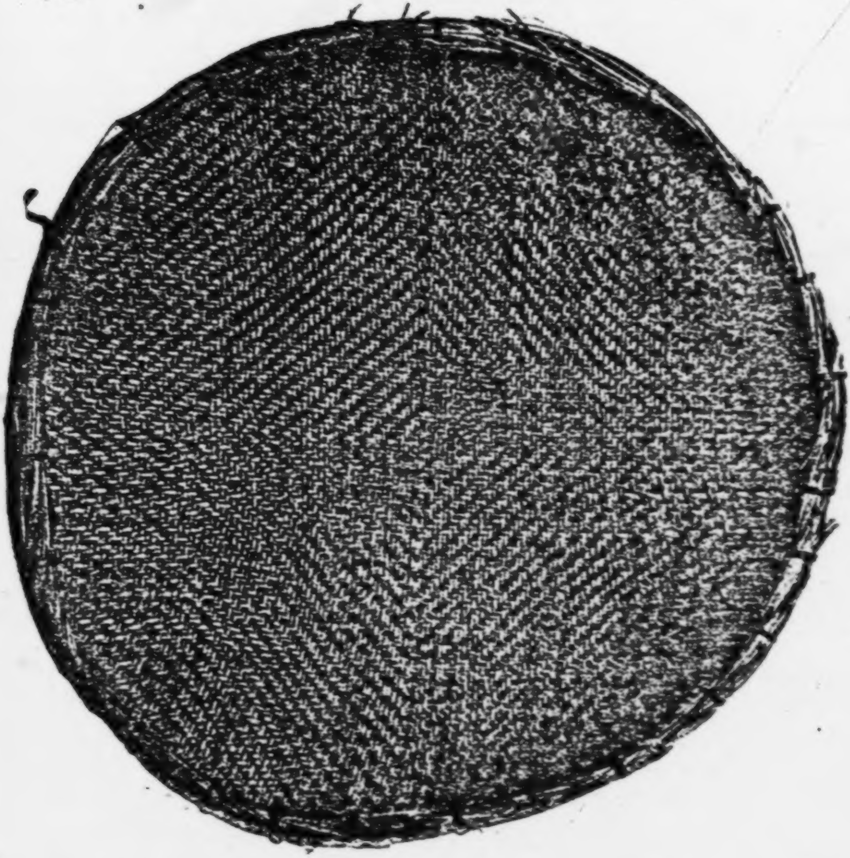


Fig. 116. Sieve in the process of being made. Prov.: Saladito (upper Pilcomayo). (About 1/4 nat. size.)

It will be noticed that, having arrived at the vertical diameter, the elements of the woof, which until then had obeyed a binary rhythm, change it abruptly. The first time, the stalk crosses over; the second, it passes under three elements of the warp;

[Text continues on p. 318]

Plate LXXXII



Sieve (urumpé). Prov.: Igũembé Valley. (1/3.5 nat. size.)

/459 cont./

285 the third, it again passes under one single element, then again three elements are crossed over, then only one, to recommence passing under three elements, then again under one. This new rhythm continues along the whole length of the vertical and horizontal diameter and permits the formation of the sides with concentric squares (see Plate LXXXI, 2 /see p. 313/).

/460/ Plate LXXXIII, Figure 1.[1] Diameter: 43 centimeters. Provenance: Ivu.

The technique and decorative process are exactly the same as for the preceding specimen, with the exception, however, of the alternation of the dark and light fibrous bands.

Plate LXXXIII, Figure 2. Diameter: 33 centimeters. Provenance: San Luis region.

This urumpé is made according to the same principle as the other sieves, but it does not involve the change of rhythm along the two diameters. Consequently, it does not appear to be embellished with any geometric motif. The warp and woof elements always cross in pairs.

Plate LXXXIV, Figure 1.[2] Diameter: 42 centimeters. Provenance: Saladito.

The urumpesa are distinguished from the urumpé not only by the greater width of the fibrous strips composing the fabric but also by the technique of this fabric. The woof elements cross regularly those of the warp, passing now under, now over, but each time they cross only one single element. This technique is the one Mason calls checker work.

The intervals between the elements are also larger and facilitate the passage of big kernels of corn.

Plate LXXXIV, Figure 2. Diameter: 40 centimeters. Provenance: Saladito.

The principle of the technique is the same as for the preceding sieve, with the one exception that the warp and woof elements are very wide.

[1] [See P. 320--Analyst]

[2] [See P. 321--Analyst]

/460 cont./

Fans or Fire-blowers

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184 Great was my surprise when upon arriving in the Chiriguano villages of the upper Pilcomayo region I found fire fans
[171] identical with those of the Indians of Brazil and the Guianas. Nordenskiöld (10, p. 56) barely mentions them and insists on their rarity. The fact is explained by the absence of this cultural element in all the rest of the zone inhabited by the Chiriguano. In most of the villages they use old hats or fragments of baskets to fan the fire.

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285 Plate LXXXV.* Length, 28.5 centimeters; width, 31 centimeters. Provenance: Saladito.

The making of these fans is rather simple. The leaves composing them cross in a rhythm of two. On the edge the stalks have been bent back and, passing again across the fabric, are interlaced to form a pucker on each side. The free ends /Plates LXXXIII-LXXXV appear here/ /461/ have been plaited on top and one part passed into a split stick forming the handle (Fig. 117).

C
[171] An important remark must be made on the subject of these fans. They /Fig. 117 appears here/ differ little from the fans made of a single pinnate palm leaf, such as are found in Brazil and Paraguay. The Chiriguano, having no palm trees of this

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[824] species in their new homeland, had to /Fig. 118 appears here/ adopt the palmate leaves of the karandaí. They replaced the petiole, which forms the handle, with the split stick to which I have alluded. (Max Schmidt, 2, Figs. 106 and 107, pp. 219-220.)

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[824] /462/

"Flowers"

On feast days the Chiriguano of the Franciscan missions decorate the church with artificial "flowers" which they make from leaves of karandaí palms. These decorations are of ancient origin and derive directly from the straw amusements /jeux/ still made by the Indians in various /Fig. 119 appears here/

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353 regions of America, notably in the Guianas. The natives of the latter region often hang them in their houses where they perhaps

*[See p. 322--Analyst]

[Text continues on p. 324]

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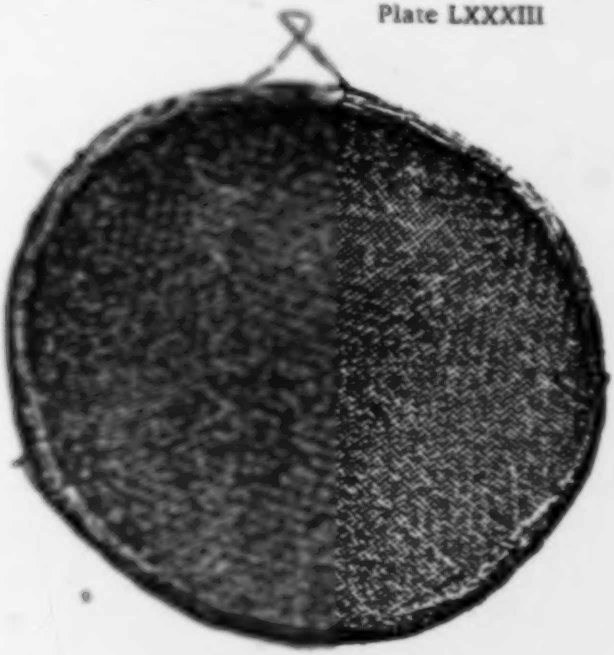

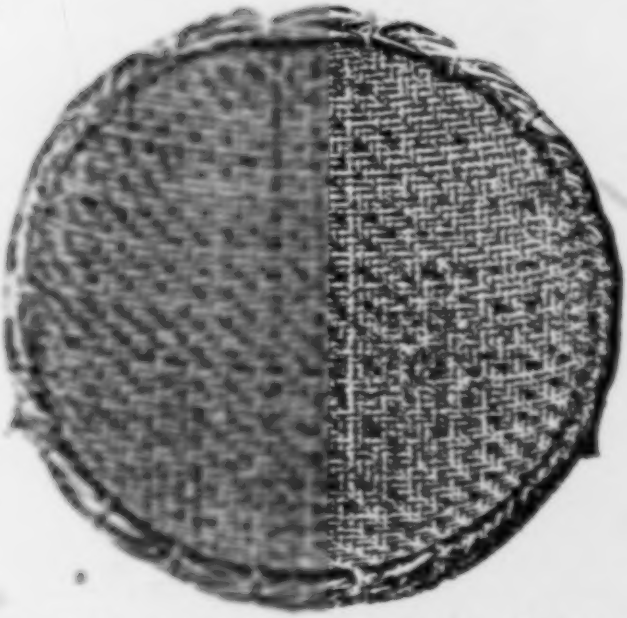

Chiriguano sieves ([illegible]). Prov.: 1, Ivu; 2, San Luis (Tarija department). (Scale, No. 1, 1/5; 2, 1/4 approximate nat. size.)

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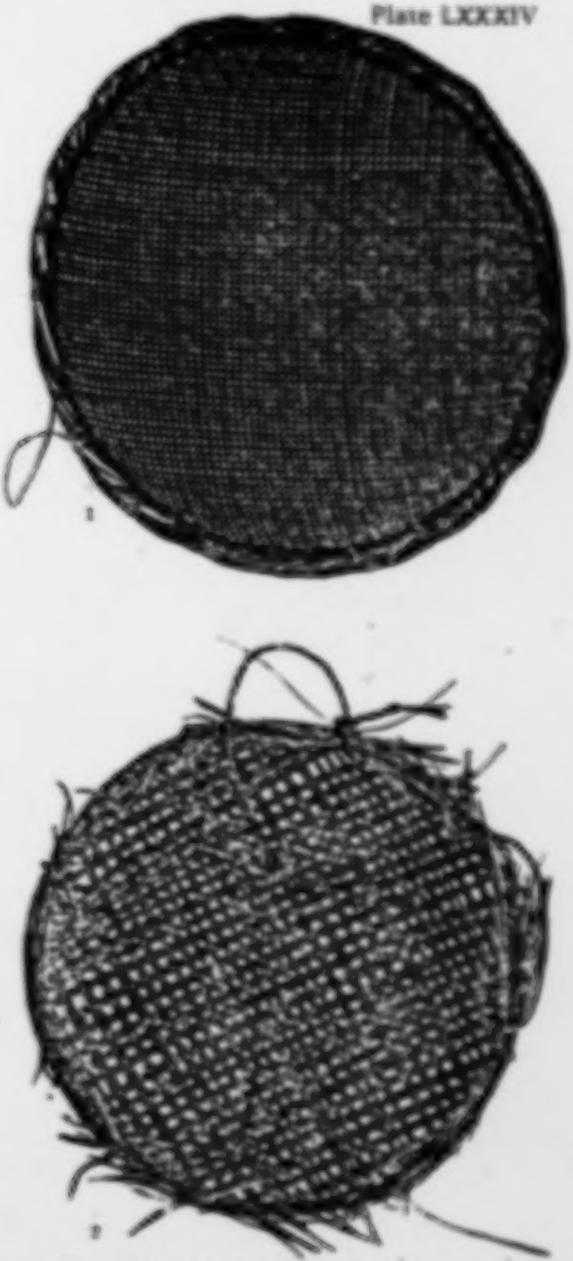
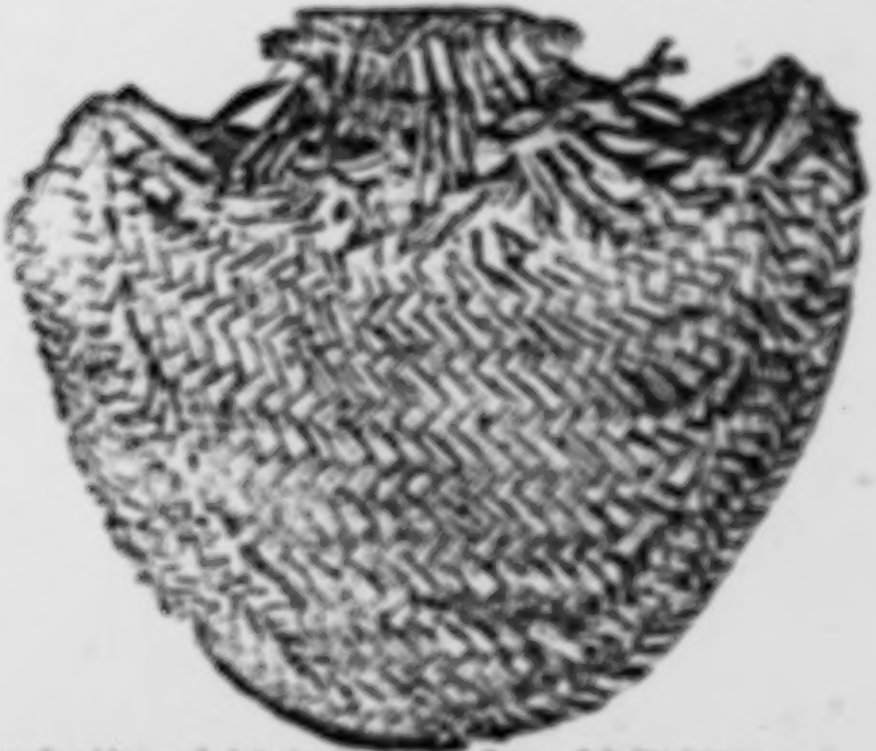
Plate LXXXIV



Large-mesh sieves. Prov.: 1 and 2. Saladito (upper Pilcomayo). (About 1/5 nat. size.)

Plate LXXXV



Fan or fire-blower of plaited palm leaves. From: Sabadora (upper Pilcomayo). (1/2 nat. size.)

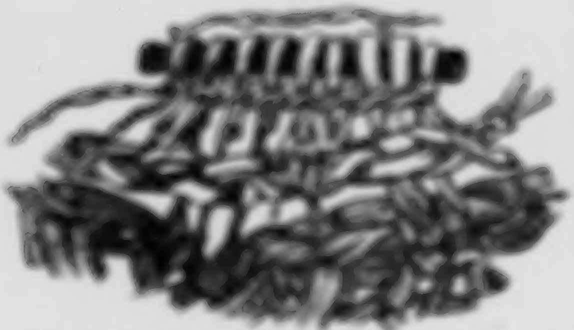


Fig. 117. Detail of the handle of the fire-blower of Plate LXXXV.

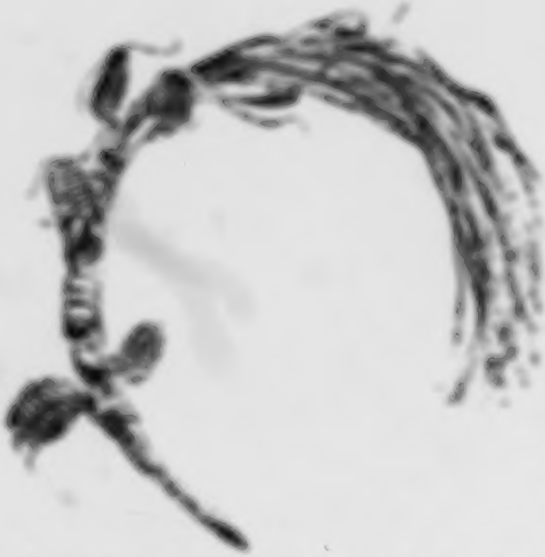


Fig. 118. "Flower," ornament made of plaited palm leaves, which the Chiriguano have blessed and with which they decorate their huts. The technique of this object is very ancient and is found also in Guiana. (1/6 nat. size.)

Guiana SR1
Chorotí SK6
Ashluslay SK5

Gr
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353

/467 cont /

serve as amulets, and, in any case, as ornaments. (Roth, pp. 437-439, Figs. 241-244 and p. 270; Koch-Grünberg, 2, Vol. II, p. 264.) In the same way the Chiriguano Indians decorate their huts with these figures, which they take care to have blessed. Exactly as in Europe they keep palm branches as lucky charms. Rosen (1, p. 61, Fig. 51) publishes a similar straw amusement which he found among the Choroti and which was pointed out to him as an ornament worn on the forehead. This explorer suspects the exactitude of this information and supposes that a ritual object is concerned. In reality, it is only a "flower," which the Choroti described by Rosen probably received or bought in some Chiriguano mission. It is enough to compare the figure of it that he gives us and ours in order to be convinced of this.

C
[illegible]
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Ci
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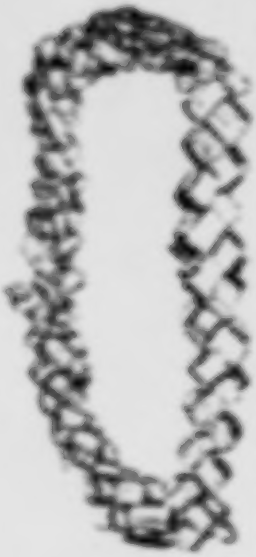

A
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301

Fig. 119. Wreath of plaited palm leaves (amusement or ornament?). Ashluslay. Prov.: Estero Patiño. (1/4 nat. size.)

A
C
Ci
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171

Figures made of palm leaves are not, however, unknown to the other Indians of the Chaco. The Ashluslay sold me a diadem braided according to this principle (Fig. 119) and Rosen (1, Fig. 44, p. 40) reproduces an identical head-ornament which he bought from a Choroti tribe.

/462 cont./

Chapter X

Masks

532 The handsome masks, whose description I shall give
796 further on, are worn during the carnival festivities. Difficulties
[122] with the Bolivian authorities kept me from arriving in the
Chiriguano villages at the time when they were taking place.
When I finally found myself among my Chiriguano friends,
they had emptied the last vats of *kãwi* and were /463/ in their
[126] normal state. Thanks to the closeness of the feast I was able
[241] to collect the masks published here; ordinarily they are
destroyed or used in the fields as scarecrows.

115 My host, Mr. Alberto Torrejon, who lives at Ibopeytí on the upper Pilcomayo in an Indian village, gave me some very interesting details about the ceremonies and merrymaking in which he had just participated. I transcribe them as given.

796 At my approach of any festival, the carnival, for exam-
775 ple, the first act consists in causing the souls of the dead to flee.
789 If this precaution is not taken, the widows and relatives of the
deceased will have to abstain from taking part. For the purpose of purifying the air, a drum is beaten, and the whole family /Fig. 120 appears here/ which has lost a member weeps and shouts. When the spirits have cleared out, the drum, in a joyful rhythm, gives the signal for merrymaking.

796 The festival is opened by a man and a woman who, with a stick decorated with flowers in hand, advance toward the middle of the square, followed by all the inhabitants in a long chain. When they have arrived at the middle of the area extending between the huts, the couple plants this sign, thus giving the signal for the festival.

[535] The chain breaks up and small groups form to dance in a ring. Their dance consists in advancing and retreating in triple time to the sound of flutes and drums.

/463 cont./

796 The attraction of the carnival consists of the enormous
273 consumption of kãwi and alcohol which takes place then. Men
578 and women drink, one trying to outdo the other; and, under the
influence of drink, old angers and secret hates are awakened
and the most excited provoke each other and come to blows.

796
532

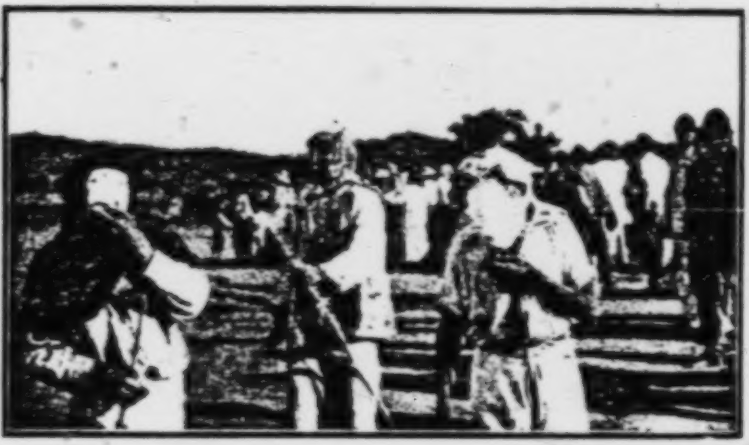


Fig. 120. Chiriguano Indians wearing masks. (Photo. by the R. P. H. Catinari.)

796
273 /464/ The "captain" must then call them to order and separate
578 the combatants.

Some people increase the tumult by blowing into their
796 sénéné (long whistles).
534 Sexual passions become aroused, and the men begin to
796 whirl around the women, whom they entreat, a calabash of
832 kãwi in the hand, while reciting to them in a singsong tone
786 pieces of verse of this type:
539

Epuka, puka maipora	Laugh harmoniously
Ševe no	For me
Epuka, puka maipora	Laugh harmoniously
Ševe no.	For me.

/464 cont./

796	Eyu šekuama	Come and kiss me
832	Šemireko mi	My little wife
786	Diyuru emesie	Give me thy mouth
539	Tuiša dipota	I love thee much
	Še songo pe	With my heart
	Ime deresa ikavi	Thou hast pretty eyes
	Ime diyuro misiray	Thou hast a little mouth
	Tuiša dipota	I love thee much
	Pairamo ayporu deve.	For that I am going to ask for thee.

796 532 522 During this time young or old men with their faces covered by a mask (añawasu) run here and there, force the people to dance by blows of a stick, play tricks on them, and address jokes to them.

796 [273] The feast lasts as long as there is kãwi or alcohol. At the moment when it is on the point of ending, a final ceremony takes place. The rite of going out is similar to the rite of entering: the couple who planted the flowery stick tear it from the ground and go out of the village, followed by the añawasu and all those who took part in the festival. The procession advances to a certain distance from the village to the sound of the flutes and drums. They throw away the masks and throw stones while shouting. The carnival is finished and everyone goes home. [585] Some take along their new wife, for it is at this moment that most marriages are celebrated.

796 177 178 [241] The carnival festivity such as I have just described involves only a few elements borrowed from the half-breeds or creoles, outside of the coincidence of dates. This is an ancient feast of a purely agricultural character, which the Chiriguano have acquired the habit of celebrating at the same time as the Bolivian carnival. Besides, the Indians of Ibopeytí are pagans.

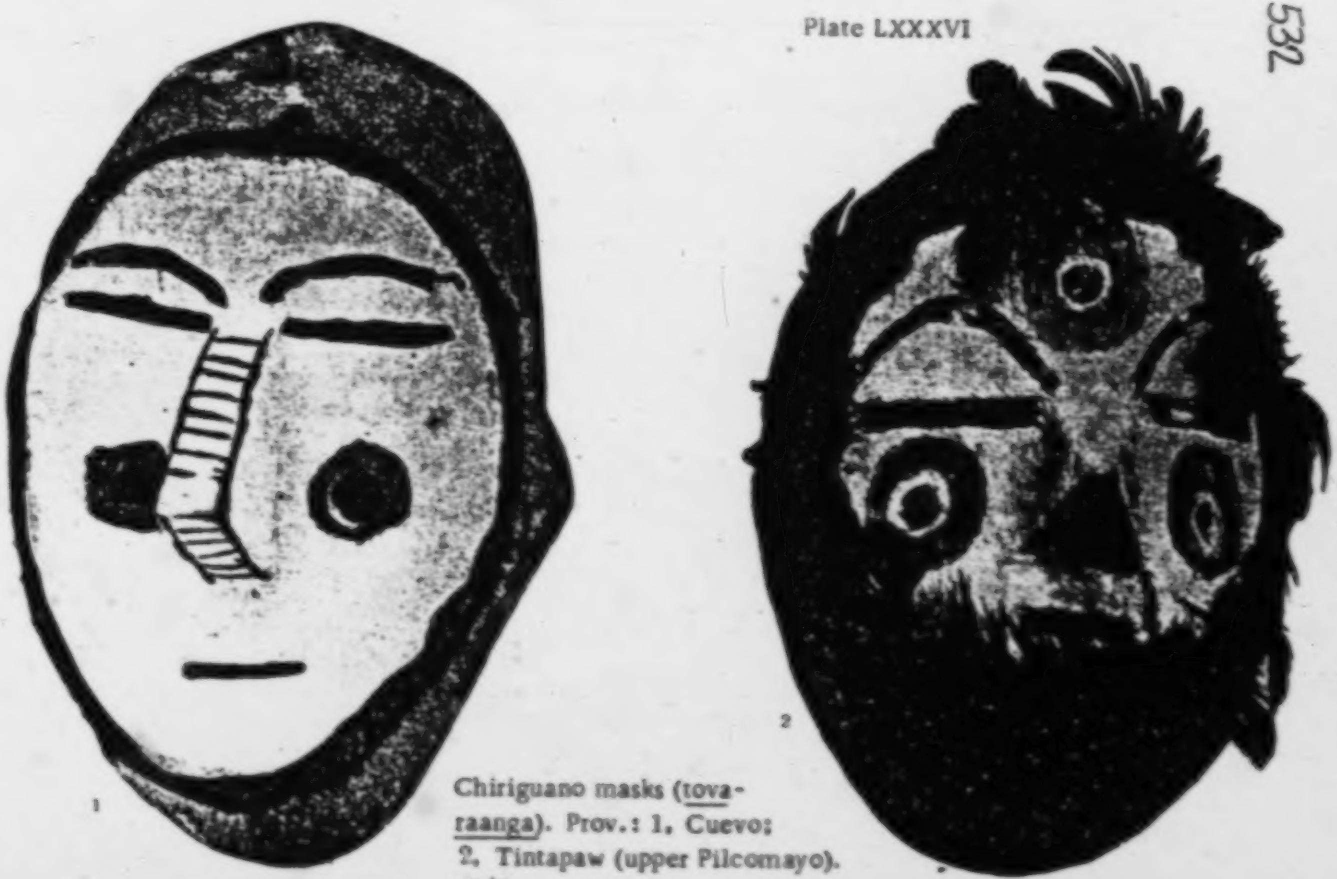
796 241 171 The masked men are supposed to represent the spirits of the dead, as their name indicates (aña: spirit; wasu: great). As in the festivals of the Guianas and Central America, they come in numbers /Plate LXXXVI appears here/ /465/ to insure for their

[text continues on p. 329]

532

1: Métraux--328 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LXXXVI



Chiriguano masks (tovaraanga). Prov.: 1, Cuevo; 2, Tintapaw (upper Pilcomayo). (3/5 nat. size.)

C /465 cont./
796 descendants or relatives the fertility of the fields and the
241 abundance of the future harvest. These masked festivals have
[171] their counterpart in the famous ceremonies of the populations of
C the Negro River, the details of which Koch-Grünberg has made
[177] known to us. Besides, it is probable that the Chiriguano
borrowed these ceremonies, and especially the masks, from the
A Chané. It is the racial brothers of the Chané, the Arawak of
796 the Negro River, who celebrate these festivals with the most
241 splendor. The Chané of the Parapití still accord to these ancient
Ce rites more importance than the Chiriguano, and their masks
796 crowned with immense tufts of feathers are, it appears, more
241 sumptuous than those of their old Guarani enemies.

532 In the missions the carnival has lost its purely pagan
C significance and has become contaminated with usages which
796 the Chiriguano have borrowed from the half-breeds. Nino
[797] (pp. 267-270) gives a good description of them, of which I
[177] shall summarize the principal features.

C The festival is directed by a personage wearing an old-
[532] man mask. He stops at each corner of the square, recommending
peace and harmony to all.

Then they give themselves over to different games: masked personages scatter bean pods or corn bran upon the dancers.

Young men, masked but almost entirely naked, daub
C themselves with mud and try to soil all those who have new
[177] garments. These two customs can have only a Bolivian origin.

C Individuals who are also masked mime a combat between
796 a jaguar and a bull which is finally put to death by a fanciful
535 butcher. Then they pass on to the pleasures of the dance. "The
[536] dancers form a large circle by joining hands and dance thus
three times. Three times also they squat down, and three more times they pass under the extended arms of a couple of the same circle, and finally the same number of times they press against one another, forming a big mass, their faces turned toward the outside and their hands folded. They remain in this position until another couple dances around them. These do not hold each other by the hand. The man chases the woman and tries to grab her. She avoids him and goes to hide in the middle of the others."

/465 cont./

796 Toward the end of the festivity, the men improvise a seat by crossing sticks. They have a child sit on it and form a bulwark for him with bamboos. The others come and rain a hail of blows on him, without hurting him, however. Then they have him get down and begin this ceremony over again three times in different places.

On the second lap, the masked individuals go from house to house and receive from each person the strangest objects: bean pods, watermelon rinds. On the third lap, young and old begin to weep.

To finish up, they go in a procession to throw away the masks and all wash their faces and hands.

/466/ Description of the Masks

Plate LXXVI

532 1. Mask of toroboki wood (light, soft wood). The face is painted white and framed by a black ribbon fastened with small wooden pegs. The eyebrows, mouth, and the parallel lines which cross the bridge /Fig. 121 appears here/ of the nose have been painted in black. The edges of the nose are emphasized with two green lines. On each cheek, two concentric circles, one black and the other green with a black dot in the center. On each side, a hole through which passes a cord serving to hold the mask over the face.

Small cavities along the periphery seem to indicate that at the time of the festival feathers were stuck along the edge of the mask exactly as on the following specimen.

2. This mask is the one which, in my collection, is in the best condition. The face, whitened with a substance similar to lime, is bordered with feathers stuck into the wood. The eyebrows are painted in black, as is the upper lip. The mouth is represented by a slit. The facial painting on both the cheeks and the forehead is green, except for the center dot, which in each disk is brown.

/466 cont./

532 The mask of Figure 121 comes from Tabacal near Oran, where it was acquired by Mr. Palavecino from Chiriguano

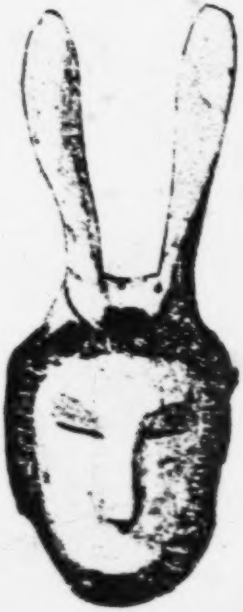


Fig. 121. Chiriguano mask from Tabacal (near Oran). Museo Nacional de Buenos Aires (Palavecino Collection). (1/9 nat. size.)

Indians settled in the region. Its dimensions are considerable. It measures 52 centimeters in length by 16 centimeters in width. It is painted white and the face is framed by a fringe of feathers. *I do not know the significance of the large ears which surmount* it.

/466 cont./

Chapter XI

Combs

C 302 Formerly, at the time when they carried out the conquest G T [302] of their present territory, the Chiriguano wore a tonsure after the fashion of their relatives in Paraguay and the coast of Brazil, the Guarani and Tupinamba, who shaved the whole anterior C [177] part of the skull with a bamboo chip /467/ (see Métraux, 2, pp. 181-185) (1). Later, probably under the influence of the Chané or the Quichua /Quechua/, the Chiriguano abandoned the tonsure and let their hair grow, letting it fall over the nape of the neck and the back. They were content to cut it on the forehead from one temple to the other.

C 302 178 This hair style, still common in the last century, is tending to disappear in turn. The only ones who have remained faithful to it are a few old men and the inhabitants of several villages lost in the valleys of the upper Pilcomayo.

C [291] [848] The Chiriguano who continue to observe the old style knot their long hair around their heads and hide it under a hat or a kind of turban when they go to work among the white men, for fear of being ridiculed.

1. Annuae litterae, page 407: "Cultus eorum singularis valde, coronis in modum nostrorum Sacerdotum utuntur, reliqui vero capilli ad ulnam circiter dimidiam pendent a tergo; corpora utplurimum variis depingunt coloribus."

(Their appearance [to the Chiriguano] is truly singular. They make use of a tonsure similar to that of our priests, and others let their hair hang down their backs to the length of an aune and a half. They dye their bodies with various colors.)

/467 cont./

302 The women never cut their hair according to the custom of the other Indian women of the Chaco, so they have heads of long and remarkably soft hair. [301] They gather their hair together on the nape of the neck by means of a red or blue ribbon, which they knot on the forehead after passing it around the head (see Plate VI, 1 and 2 /see p. 73/).

302 515 824 412 388 Chiriguano women are extremely meticulous about their hair and wash it nearly every day. For soap they use *ñitira* seeds, which they crush in a little mortar (Fig. 122) especially intended for that use. The *ñitira* seeds, rich in saponin, lather easily.

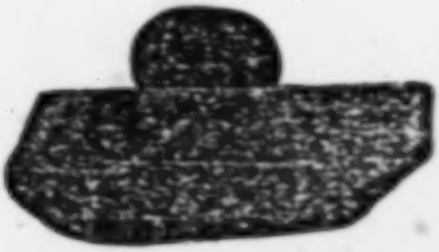


Fig. 122. Chiriguano stone mortar for crushing *ñitira* seeds. Prov.: Ivo. (About 1/4 nat. size.)

302 For me it was always a pleasant spectacle in the morning to see the women come back from the river with their hair twisted on the front of the head and fastened into a conical chignon. They would let it dry, then would begin to comb it slowly until it was soft and shining.

412 303 184 Two types of comb coexist among the Chiriguano. On the upper Pilcomayo in the Igüembé valley and in Ivu, they are carved out of a small board, and often the flat part which serves as the handle is cut out /468/ with art. In the Caipipendí valley and among the Chané, besides combs of the preceding type there are others composed of fine splinters of wood wedged between two splinters of bamboo and held in place by a clever plaiting of cotton threads forming a design.

/468 cont./

600 forming a design. Combs of this category generally have a double
412 row of teeth but sometimes one row is entirely covered by the
171 plaiting and is transformed into a handle (Nordenskiōld, 2, Fig.
[303] 109, p. 204. These two kinds of comb are also found in the Andean zone; but whereas the first is limited to this geographical area and especially to northwestern Argentina, the second, which includes all varieties of composite combs, has a vast distribution

[531]

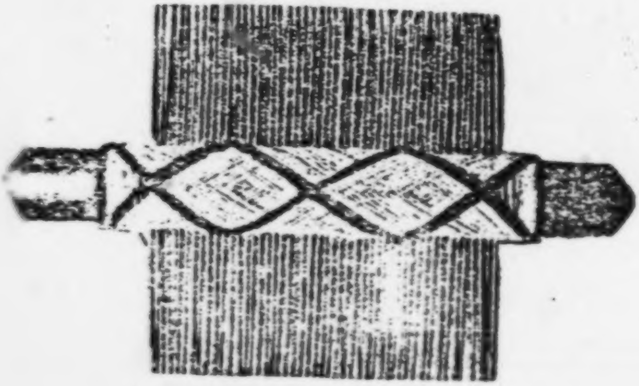


Fig. 123. Composite comb made of fine splinters of bamboo. Chiriguano. Prov.: Carurutí. (1/5 nat. size.)

over all South America, in the Inca Empire as well as in Brazil. The Chiriguano doubtless used them well before they settled in their present location. It is not the same with the comb of carved wood, which they borrowed from the Chicha or the Humahuaca. With regard to two combs in my collections, one (Plate LXXXVII, 14) has a handle carved in the shape of a dog, and the other, a deer (Plate LXXXVII, 15). They strongly resemble a comb found in the Quebrada de Humahuaca, which is also surmounted by the silhouette of a quadruped (Debenedetti, 2, p. 247, Fig. 186). At Kipon in the Calchaquí Valley Debenedetti (1, p. 27, Fig. 16) discovered a comb whose upper part represents a human head, in which our author thinks he sees an idol with a sad expression (!?). The half-breed women of that valley have kept up to our times the ancient indigenous combs of algarroba wood.

/468 cont./

412 171 At La Paya, Ambrosetti (6, Fig. 254, p. 484) discovered combs cut out of a small wooden board and some composite combs. Instead of simply recording the coexistence of two different types of combs /Plate LXXXVII appears here/ /469/ in the same place, a very natural phenomenon by reason of the heterogeneous character of the culture of La Paya, Ambrosetti puts forth the strange hypothesis that these combs served for carding wool, without taking the trouble to inquire whether this instrument was known in pre-Columbian times.

303 322 467 The making of combs, like all wood carving, is an essentially masculine job.

412 413 174 The table on Plate LXXXVII indicates my idea of the morphological evolution of the different forms of combs which I have collected.

Chapter XII

Furniture

352 [114] Since the diverse cultural elements which constitute the furniture of the Chiriguano have been completely studied by Nordenskiöld (10, pp. 8-22), I shall limit myself to mentioning them here, insisting only on several details. /Fig. 124 appears here./ /See p. 338./

[342] Let us enter a Chiriguano hut. The door we open is a kind of screen of reeds or a cowhide hardened in the sun. Daylight penetrates the interior through this opening. The only important [513] piece of furniture is a wooden cot (Fig. 125), a kind of bedstead generally occupied by two persons between whom one or two children come /470/ to slip in somehow or other. Nor do the Chiriguano hesitate to sleep on the ground on an oxhide, which they spread out in front of their house. On the upper Pilcomayo, in nearly all the huts one can /Fig. 125 appears here/ /See p. 339./ see one or two hammocks which serve either as seats during the day [286] [177] or as cradles for small children. Their technique, that of the double thread (Doppelfadentechnik), continues an old Guarani

[Text Continues on P.338]

Plate LXXXVII /left side/

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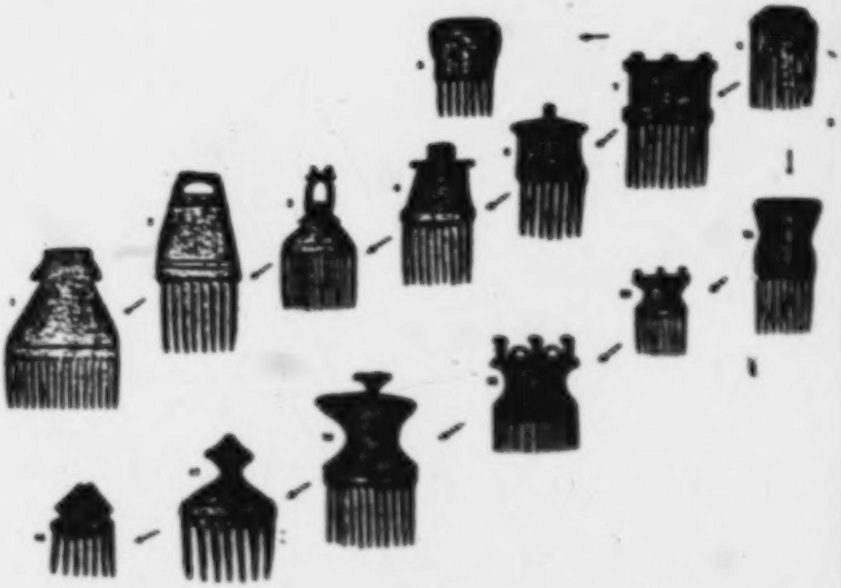
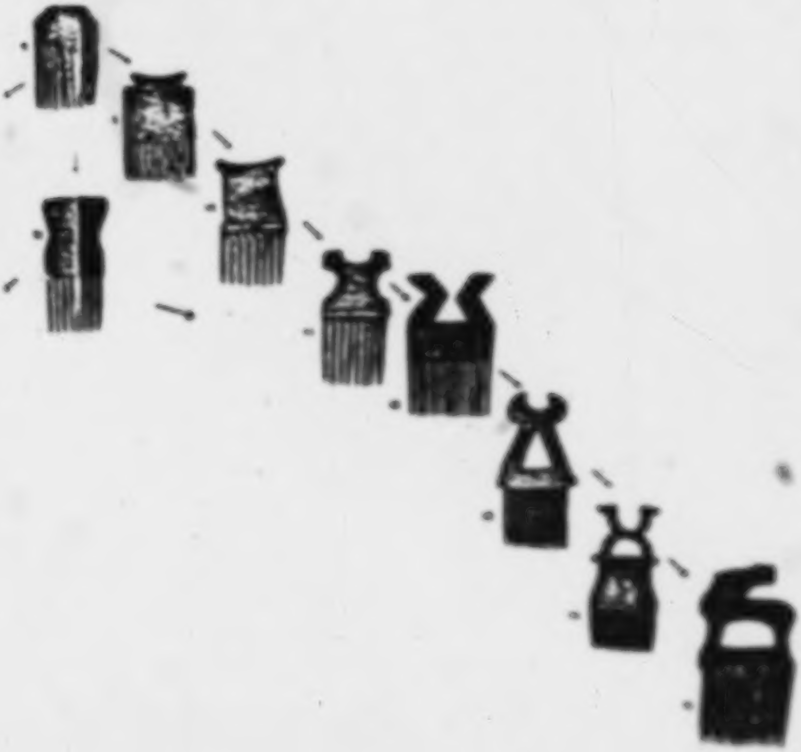


Table indicating the way in which the evolution of the different types of comb might have come about. Prov.: 1 and 2, Yumbía: 3, Isirié (upper Pilcomayo): 4 and 5, Ñawirenda: 6, Igũembé: 7, Caipipendí: 8, Igũembé: 9, Ivu: 10 and 11, Tiwiraití: 12 (after Nordenskiöld): 13, Yumbía: 14, Igũembé: 15, Ñawirenda: 16 and 17, Carurutí: 18, Ñawirenda: 19 and 20, Ibopeytí: 21, Saladito. /Combs 9-15 are shown on the next page./

/Right side of Plate LXXXVII/



/See the caption on the left side of the plate on the preceding page./

/470 cont./

352 [236] [199] and Arawak tradition. Some hammocks, not many, are crudely woven. The threads which /Fig. 126 appears here/ compose them are of wool: formerly they were doubtless of cotton (Plate XXXVIII).

352 854 754 It is a delicate business to persuade a Chiriguano mother to sell you the hammock of her nursling. She fears that an /Plate LXXXVIII appears here/ /471/ evil-intentioned person will profit by the fact that the fabric is impregnated with urine, in order to indulge in magical practices which would make the new-born child die.

342 351

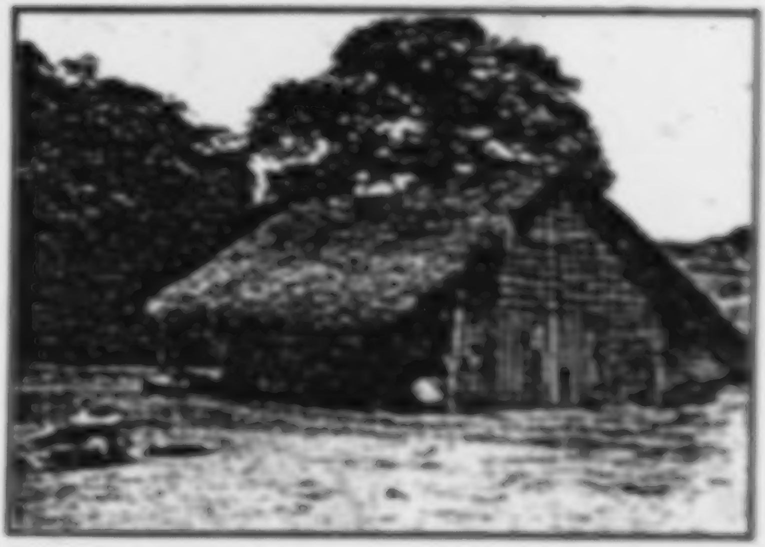


Fig. 126. Chiriguano hut. Saladito (upper Pilcomayo). (Photo. A.M.)

353 [415] Along the walls are lined up vessels of all dimensions which /Figs. 127 and 128 appear here/ are kept there for the drinking feasts: some contain seed, others serve as linen cupboards or provision bags. On the walls, generally in the four [392] corners, hang reed screens or loops made of palm leaves /Fig. 129 appears here/ which take the place of shelves (Figs. 128 and 129).

[TEXT CONTINUES ON P. 342]

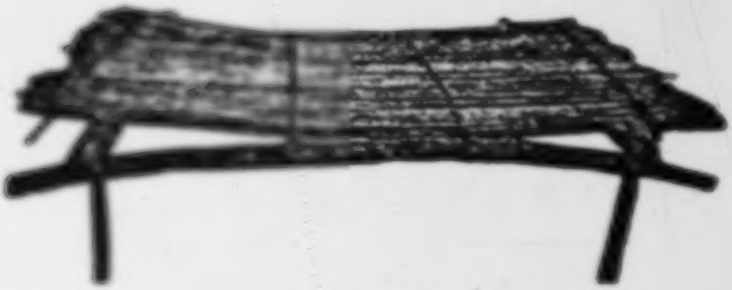


Fig. 175. Wooden cot (catre). Chiriguano Indian bed. Prov.: Ivo. (About 1/8 nat. size /sic/.)

[286]

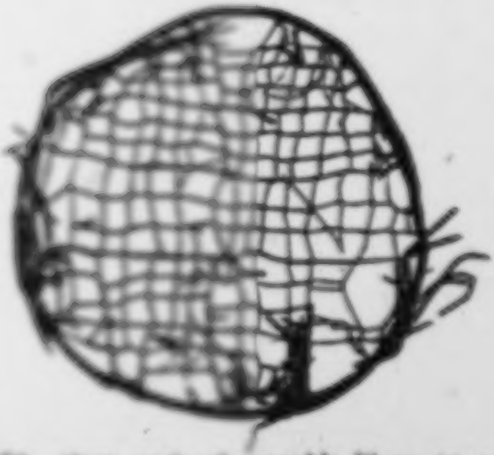
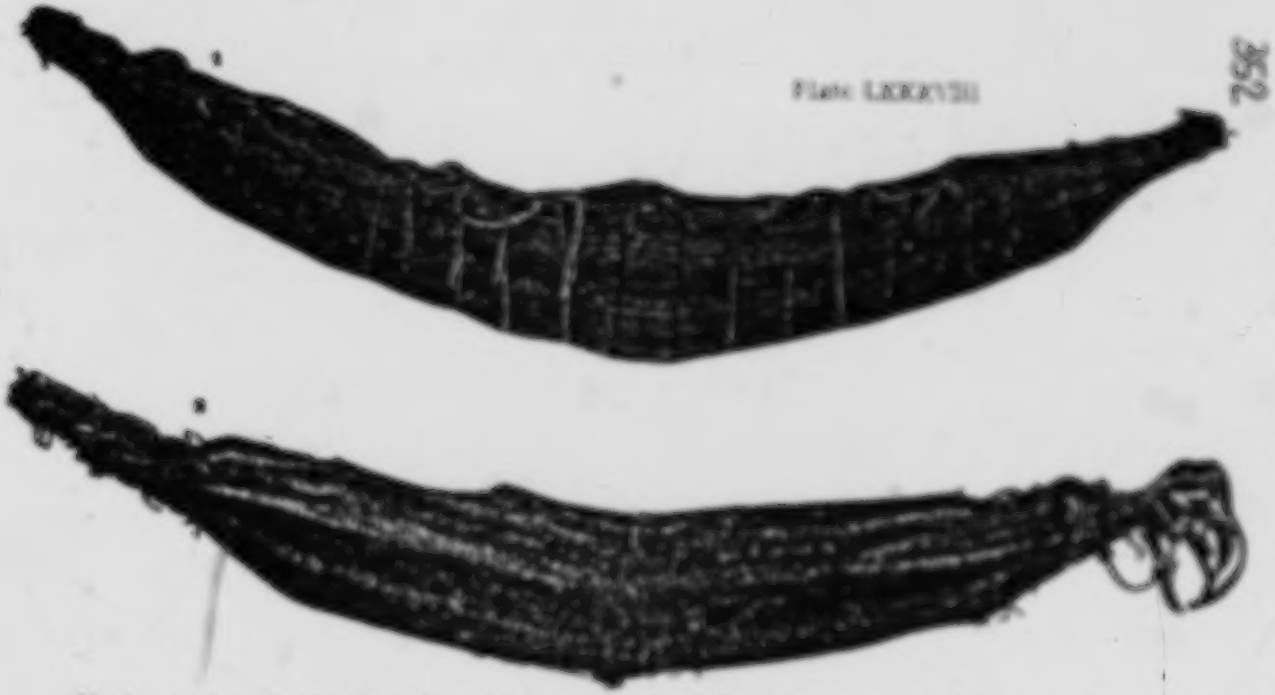


Fig. 176. Hoop made of vegetable fibers, to serve as a sieve. (About 1/9 nat. size.)

Plate LXXXVIII



Chiriguano hammocks of wool. [illegible] [illegible], [illegible] [illegible] [illegible] (upper Pilcomayo). Note: Hammock No. 2 is woven.

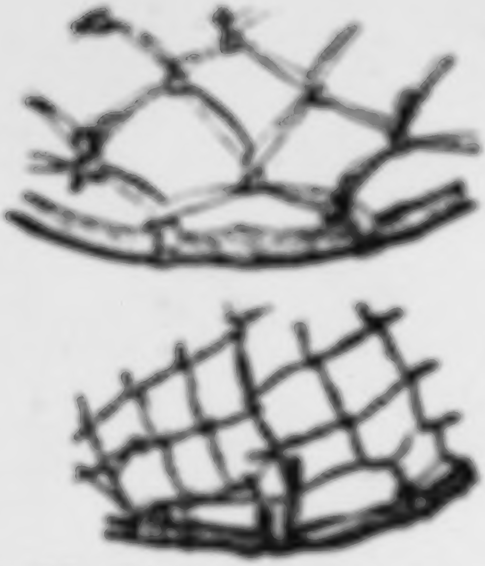


Fig. 177. Sketch indicating the technique of the loops of the type of the one in Figure 176.

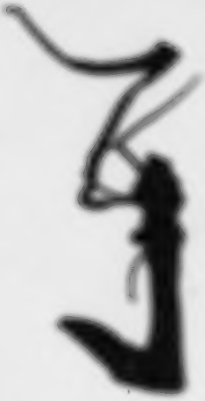


Fig. 178. Deer foot dried in the sun to serve as a hook for hanging. Prov.: Soledad. (About 1/5 nat. size.)

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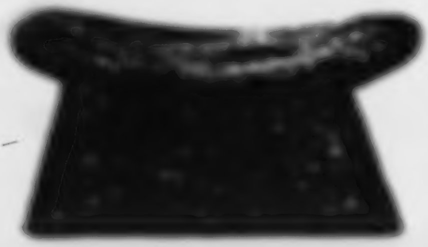

Fig. 179. Double-cornered bench. Prov.: Bopeyrí. (About 1/7 nat. size.)

/371 cont./

353 and 177). Everything in the world can be found there: small vessels, baskets, boxes, packages carefully wrapped in cloth, in short, a thousand little objects which the Chiriguano women regard as their treasures. From the roof hang hooks from which
[616]
[239] are suspended household effects or supplies. These hooks are generally of wood, but there are some also which are formed by a deer foot bent back and dried in the sun (Fig. 130).

Every chink in the walls is transformed into a hiding-place where the women put their scissors, the men their knives or combs. /372/ Bows and arrows are slipped between the struts of the roof.

In some huts whose walls are plastered with earth, the Indians arrange niches in the shape of swallows' nests, which serve as rudimentary cupboards. Might there be in that a distant remembrance of the niches so characteristic of Inca houses? It is possible.

354
516
[199]
[196] The inhabitants of each hut sit on the cots or on /Figs. 130-132 appear here/ chairs with backs very well copied from those of the creoles. The women generally squat on the ground. On the upper Pilcomayo, one still finds benches with two seats (Fig. 133), a cultural element which the Chiriguano inherited from their ancestors of the Amazon basin.

356
[354] The fire for cooking is lighted in the middle of the hut. Chiriguano dwellings are clean. I have never caught fleas or other vermin there as I have in the ranchos of creoles or half-breeds. The women sweep their huts at least once a day. One is rarely disturbed there by mice (Fig. 133).

415
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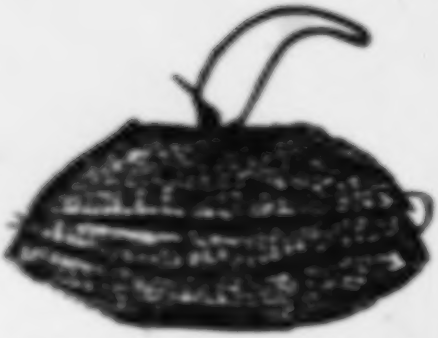

Fig. 130. Armadillo shell (tatu-pire) in which Chiriguano women keep objects for needlework, small pieces of cloth, etc. Prov.: Saladito. (About 1/3 nat. size.)

412
824
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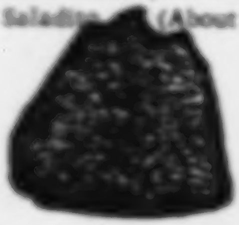

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Fig. 131. Bull's testicle (toro-upía) which the Chiriguano hang up in their huts as a small container. Prov.: Saladito. (About 1/7 nat. size.)

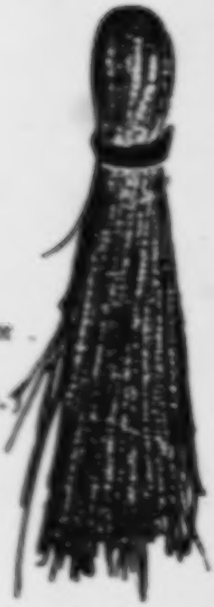

Fig. 132. Broom made of karandaí leaves (tupisa). Prov.: Yumbía (upper Pilcomayo). (About 1/4 nat. size.)

/473/

Chapter XIII

Toys and Games

524
[126] All the toys which Chiriguano parents make for their children or the latter put together themselves are represented in my collections. Nevertheless, I consider it useless to give a description of them, for Nordenskiöld (2, pp. 193-200) has been greatly /Fig. 133 appears here/ concerned with this and has reproduced all of them. Simply as a curiosity I sketch a doll clothed in the traditional tipoy and the hair of which is intertwined with a ribbon in the Chiriguano manner (Fig. 133). A little bag (Fig. 134) contains a whole assortment of tipoy in miniature. [868] Minuscule vessels and baskets (Fig. 109) have been made for the use of little girls, who, in playing, thus learn little by little to become excellent housewives.

String figures. I have never seen children make string figures (cat-craddle /cat's cradle/), but I know they are acquainted with them. At Caruruti an Indian amused himself by executing a whole series for me, some of which were sewn by the Indians themselves onto the leaves of my notebook. According to the figure they wanted to produce, they used both hands or helped with the mouth and feet (Figs. 135 and 136). The "full moon" (Plate XXXIX, 3) /Fig. 134 appears here/ was made by my Indian who, having sat down, used feet and hands.

524
121 String figures have extraordinary interest from the point of view of comparative ethnography. If they prove themselves identical in two different regions, they can testify to trade or migrations, like certain games which pass from one region to the other without modifying their character or modalities. Games are the most stable of all cultural elements since they are independent of the environment, race, or way of life, at least in general. It is urgent to collect in South America /474/ the greatest possible number of string figures in order to be able to study their distribution. For this continent we know only a very small number, but this, insignificant as it may be, already allows us to establish some very curious facts.

[Text continues on p. 346]

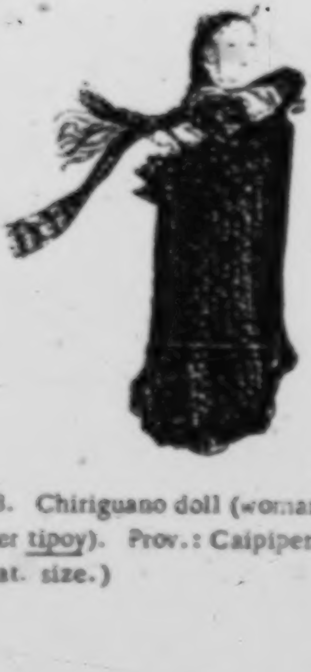

Fig. 133. Chiriguano doll (woman with her tipoy). Prov.: Caipipendí. (2/5 nat. size.)

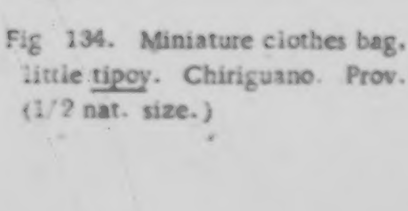

Fig 134. Miniature clothes bag, full of little tipoy. Chiriguano. Prov.: Ibopeytí. (1/2 nat. size.)

/474 cont./

000 524 171 already allows us to establish some very curious facts. Thus, among the string figures I have brought together, three are exactly like figures from various tribes of the upper Negro River and the Guianas. The first is the one the Chiriguano call "full moon" (yasiwasu) (Plate LXXXIX, 3) and we find it again among the Siusí of the Aiary River under the name of "tapir intestines" (Koch-Grünberg, ?, Vol. I, Fig. 69 c, p. 123), among the Tukano /Tucano/ designated as being a "tapir with its four feet," and among the Betoya simply as "a tapir" (id., Vol. I, p. 253, and Vol. II, Fig. 73, p. 131).

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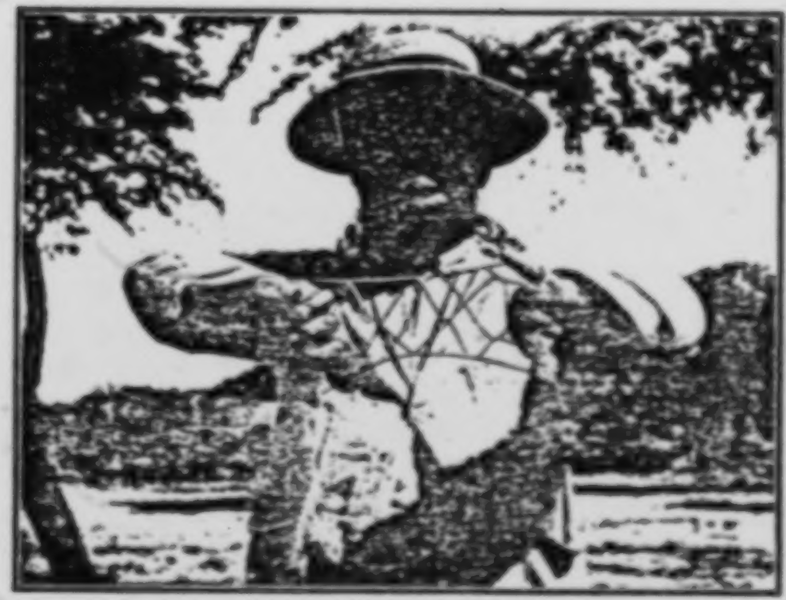

Fig. 135. Indian executing the string figure called "snake designs" (mboi-kwatía). Caruruti. (Photo. A. M.)

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171

Our "star" (yasi-tata) (Plate LXXXIX, 1) is interpreted as a "spider" by the Siusí (id., Vol. I, Fig. 69 g, p. 123) and the Kobeua (id., Fig. 73, p. 131), but the Wapiiana /Wapishana/ see a "star" in this figure, exactly like the Chiriguano (cf. Roth, Fig. 267, p. 513).

/474 cont./

524 The "snake designs" (mboi kwatía) (Plate XC, Fig. 3)
171 have their equivalents among the Akawoi, Arawak, Wapisiana, and Patamona (Roth, Fig. 289, Fig. 526), but represent, according to these Indians: "four fish walking" (sic). In his book on the Indians of the Chaco, /Plates LXXXIX and XC appear here/ /475/ Nordenskiöld (2, Fig. 25, p. 71) gives the photograph of a Choroti child who has just executed a cat-craddle identical with our "snake design." It is regrettable that Nordenskiöld has not given its meaning.

524 The string figure on Plate XC,[§] 2 represents the mark borne by the woolen blankets (jergón) the creoles put under their saddles. There is no doubt that the indigenous meaning of this figure has been forgotten and replaced by a new appellation. This is probably what has happened also to the cat-craddle (Fig. 136) named culo de caballo /horse's rear end/. /Fig. 136 appears here./ /See p. 350./

String figures can be subdivided into two categories, the first including all those which form a stable figure like a design, and the second those which represent an object, animal, or organ by synthesizing its characteristic movement.

Thus the string figures on Plates LXXXIX-XC belong to the first class, but the one which the Indian on Figure 136 is in the act of executing belongs to the second. The latter cat-craddle consists in opening or closing a small circle of string which is supposed to represent the contractions of a horse's anus.

524 Among the Siuní there are also mobile string figures which
171 symbolize an animal by imitating its typical movements (the "caterpillar," for example) exactly as among the Chiriguano.

524 The resemblances between the Chiriguano string figures and
171 those of the /476/ Guianan tribes could be explained by Arawak
177 influence, and we could suppose that the Chané kept the figures common to the whole family. String figures travel very rapidly and only their meaning changes. Therefore it is possible that the Chiriguano were acquainted with them before being in contact with the Arawak.

[§] [See p. 349--Analyst]

1: Métraux--348 E-5 (1929) 1930 SF10 Chiriguano SF10

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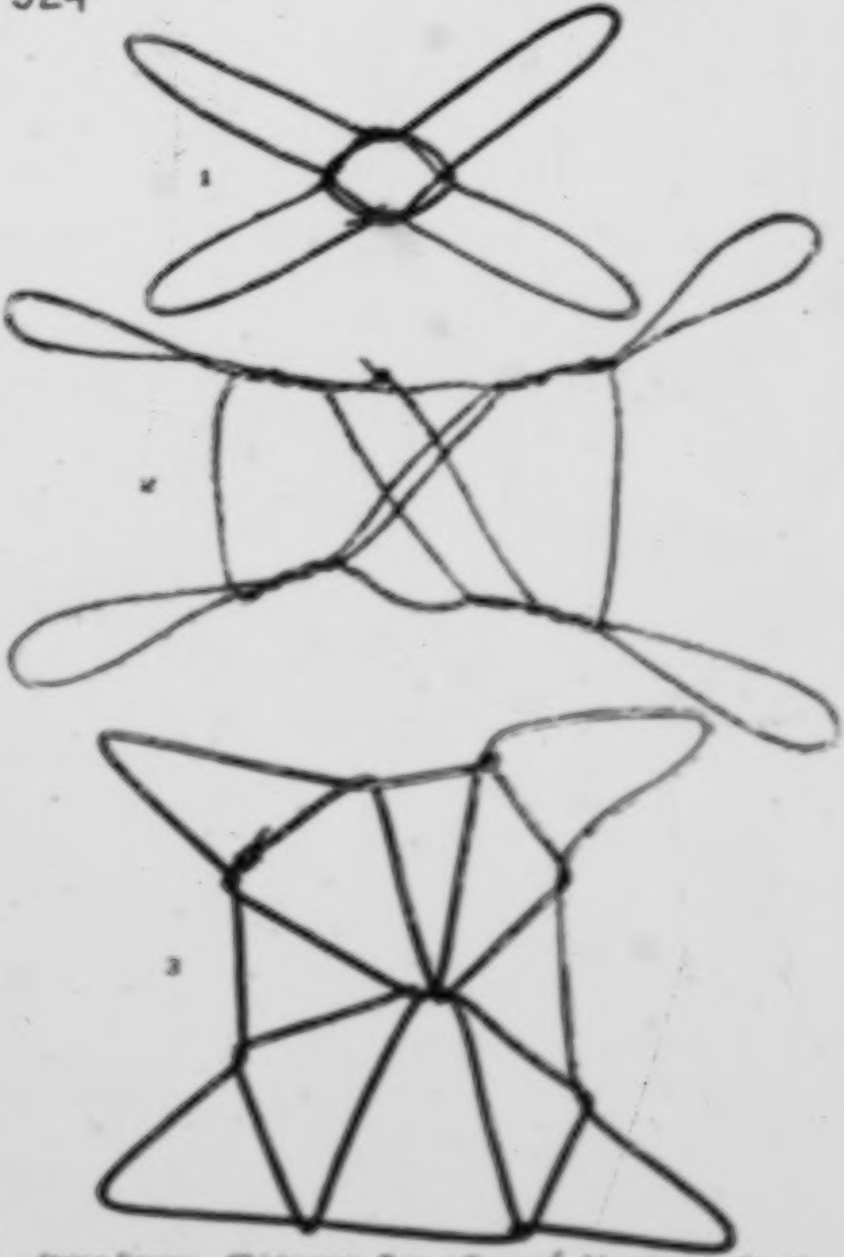
Plate LXXXIX



String figures. Chiriguano. Prov.: Caraparí. Meanings: 1. "star" (yasi-tata); 2. "pinéné (Chiriguano whistle with engraved designs) design" (pinéné-iwatia); 3. "full moon" (yasi-wasu).

1: Métraux--349 E-5 (1929) 1930 SF10 Chiriguano SF10

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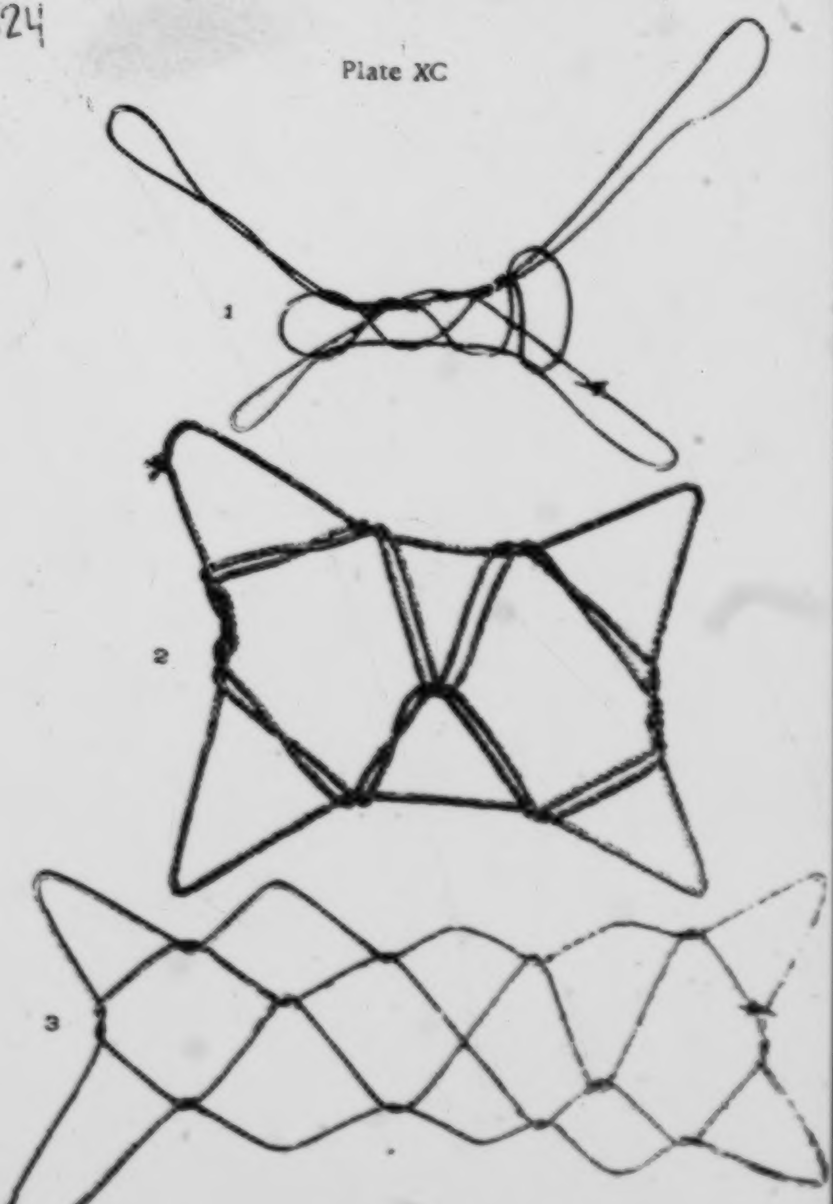
Plate XC



Chiriguano string figures. 1, "*sénéné* designs" (*sénéné-kwatía*); 2, "horse-blanket (*jergón*) mark" (*karuna-kwatía*); 3, "snake designs" (*mboi-kwatía*).

/476 cont./

123 Drawings. On Plates XCI-XCIII[1] one can see gathered to-
126 gether a certain number of drawings executed for my sake by
532 Chiriguano Indians. In order to obtain them I first approached
several old men, who refused with an outraged air as if I were
123 asking them to do a thing beneath their dignity. A small boy
126 of 12, Consito, two young men, Asensio and José Miguel, and
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532

1 524

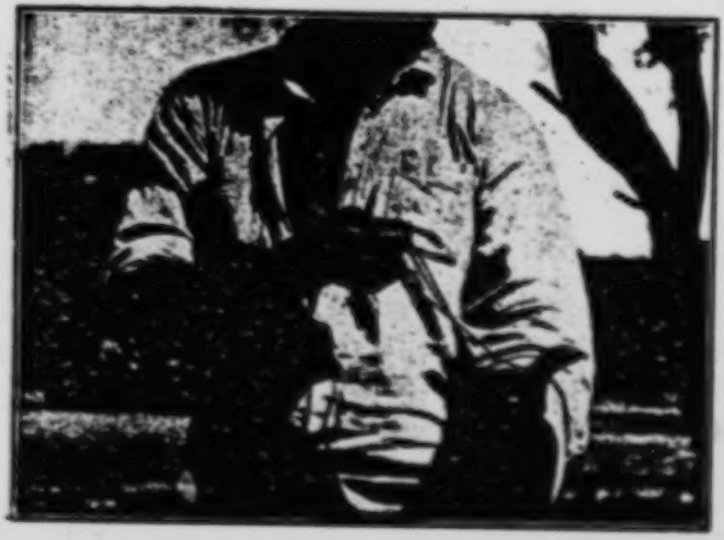


Fig. 136. Indian executing the mobile string figure called "culo de caballo /horse's rear end/.

123
126
115 a girl, Iwawasei, showed themselves willing to cover the pages
532 of my album with all kinds of sketches.

Consito did not have to be begged: I was proposing to him
a game not only pleasant but fruitful, and he had soon filled
two pages (Plate XCI, 1, 2, 4, 9; Plate XCII, 2, 4; Plate
115 XCIII, 1, 3, 10). Asensio, my faithful friend, also gave me
123 complete satisfaction. He was a curious individual, and I keep
126 a particularly vivid and congenial memory of him. He was 25
to 30 years old and was conspicuous because of his extraordinary
[322] activity and ingenuity. At any moment of the day he could
be seen busy cutting or carving a piece of wood which then

[1] [See pp. 355-357-- Analyst]

/476 cont./

115 became an ingeniously conceived tool or still oftener a musi-
123 cal instrument. Asensio used to make violins which on first
126 sight appeared to have come from a European factory. It goes
[322] without saying that he was the recognized carpenter of the
[463] village and the great provider of household articles. When Asensio had understood the purpose which had brought me to his home, he transformed his hut into a workshop for ethnographic objects; and I owe it to his enterprising spirit that I was able to collect many a piece, today no longer in use, which he reconstructed for me.

At the time when I was in his village, Asensio had received big orders for flutes for the coming Easter festival,
[532] and I had a good time watching him work. Once an instrument was finished, he would embellish it with engraved animals.

115 The material on which Asensio (see Plate XCI /see p.355/,
126 5, 7,, and Plate XCII /see p.356 /, 3, 6) incised his figures
532 exerted an indirect influence on the pencil drawings he drew in my notebook. They stand out by their angular character, but also by their clearness.

José Miguel (see Plate XCI, 8; Plate XCII, 1, 5, 7, 9; Plate XCIII /see p. 357/, 2, 4, 6, 8, 11, 12), whom Ascensio's example had encouraged, asked me to give him the notebook and pencil, and he made me a whole series of drawings which, although rather light and uncertain, sometimes are not lacking
[177] in a certain movement. José Miguel had traveled to Argentina: the train and the automobile (which he drew from memory) attest well to his admiration for the /477/ marvels of "Progress" (Plate XCII, 7, 8). Thank God his modernism had not made him forget his mythology, and he was able to draw for me a mythical episode which is to be seen on Plate XCIII, 12, A, B, C: the blue jaguar (yaguarowi, personification of the spots on the moon) is preparing to devour the moon and the sun.

123 When I had finished with the men, I wanted to have several
126 feminine drawings, imagining that the women would lend
532 themselves willingly to this game since they are the recognized artists of the tribe. All, unanimously and to my great surprise, refused to do it, shouting in the middle of gales of laughter: Aikuaa "I can't do it, I don't know how."

/477 cont./

000 laughter: Aikuaá "I can't do it, I don't know how." Only one,
123 a girl, Iwawasei, allowed herself to be persuaded by the promise
126 of a spool of thread. Her awkwardness was not feigned, as I
115 was able to see from the beginning, seeing the embarrassed air
532 with which she took the pencil. Once ready to draw, inspiration was suddenly lacking. She stopped short until I had pointed out a vessel to her to copy. Since her confusion only grew greater, she asked Consito, the small boy who made my first drawings, to help her. He drew the vessel on Plate XCIII, 10, which she began conscientiously to reproduce in series. I protested, and then she made me a horse and on this horse's back a man and a child, then a woman (Plate XCI, 3 and XCIII, 7). I am not very sure that all the drawings she told me she had made were hers, for when my attention was diverted by a visit, she had Consito secretly help her.

532 The drawings the Chiriguano executed for my sake recall not
171 only those of our children but approximate appreciably those which have been collected in various regions of South America, notably among the tribes of the Negro River (Koch-Grünberg, 1); the Taulipang and the Makuši (Koch-Grünberg, 3, Plates 28-32, pp. 129-161); the Indians of the upper Xingú (Steinen, 2, Plates III-IV), (Max Schmidt, 2, Figs. 245-247, pp. 296-300); the Choroti and the Ashluslay (Nordenskiöld, 2, Figs. 63-66, pp. 130-132); the Kainguá (Ambrosetti, 2, Plates I-III, pp. 674-682), etc.

There could be no question of making a comparative study of these drawings, so uniform is their style. The only details which are worth being brought together are those denoting similar psychological characteristics and yet these common traits are not characteristic of a primitive mentality. I should scarcely have to point out the fact that in drawing a woman, a Kainguá Indian proceeded exactly as did two of my Chiriguano artists (Plate XCI, 3 and 7): he began by representing the woman naked, then dressed her.

/477 cont./

532 The Chiriguano are too civilized for one to be able to hope to surprise interesting features in their artistic productions; some of our conventional representations appear in their /478/ drawings (see Figs. 12 B, C, on Plate XCIII /see p. 357/ showing the moon and sun).

In my opinion, the scientific value of such drawings is little and attests to only one thing: the difficulties the Indians experience in reproducing natural objects with means unfamiliar to them. On this subject I shall quote a very sensible remark of Boas (p. 65): "When one gives a pencil and paper to a primitive and asks him to draw an object from nature, one is obliging him to use instruments which are unfamiliar to him and imposing on him an unfamiliar technique. He must set aside his usual work methods and solve new problems. The result therefore cannot be a work of art--except under exceptional conditions. This is exactly what takes place for a child; the amateur artist must face a task for which he lacks technical preparation, and the difficulties which embarrass the child are precisely those which embarrass the primitive, whence the apparent resemblance between children's drawings and those of primitives."

The Chiriguano are doubtless as well endowed for drawing as Europeans. On one of the walls of the Macharetí mission I saw frescoes drawn with charcoal by an Indian, which proved real talent in their maker.

Plate XCI

Figure 1. Hut (oga). The forked sticks on which the trusses of the roof rest, although invisible, have been carefully indicated by Cimaito, maker of this drawing.

Figure 2. Woman (kuña), front view. She wears a dress. She has four fingers on each hand and her ears are disproportionately large (Cimaito).

/478 cont./

532 Figure 3. Woman (kuña) drawn by Iwawasei. At the beginning she was content to make an enormous head surmounting a stunted body and long thin legs. Upon my remark that the woman was naked, Iwawasei, out of modesty, dressed her by surrounding her legs with a kind of oval which she scribbled in black. She ended her drawing with the hair when I showed my surprise at the woman's baldness. [534]

Figure 4. Dog (yeimbá) drawn by Consito. The body is in profile and the head seen straight on. The front legs end in two claws, the hind ones in two balls.

Figure 5. Iguana drawn by Asensio. He had a predilection for this animal, which he engraved on his flutes, and he hurried to reproduce it on my notebook, keeping the slightly angular style of his incised drawings. /Plates XCI-XCIII appear here./

/479/ Figure 6. Masculine individual (aña) drawn by José Miguel. On one hand, four fingers; on the other, five.

Figure 7. Woman (kuña) drawn by Asensio. The artist began by drawing her naked, and it was only afterward that he had the idea of clothing her, drawing her dress as if seen in cross section. [53[illegible]]

Figure 8. Chiriguano shooting with a bow. He grasps the wood of the bow with his right hand and the cord with the left according to the Chiriguano custom (drawing by José Miguel).

Figure 9. The author of these lines as seen by Consito. His wide-brimmed hat is transformed into an American sailor's cap; and his glasses, which evidently impressed the Indians, are indicated head on, although the author is drawn in profile with his head thrown back. The blackened parts represent his suit.

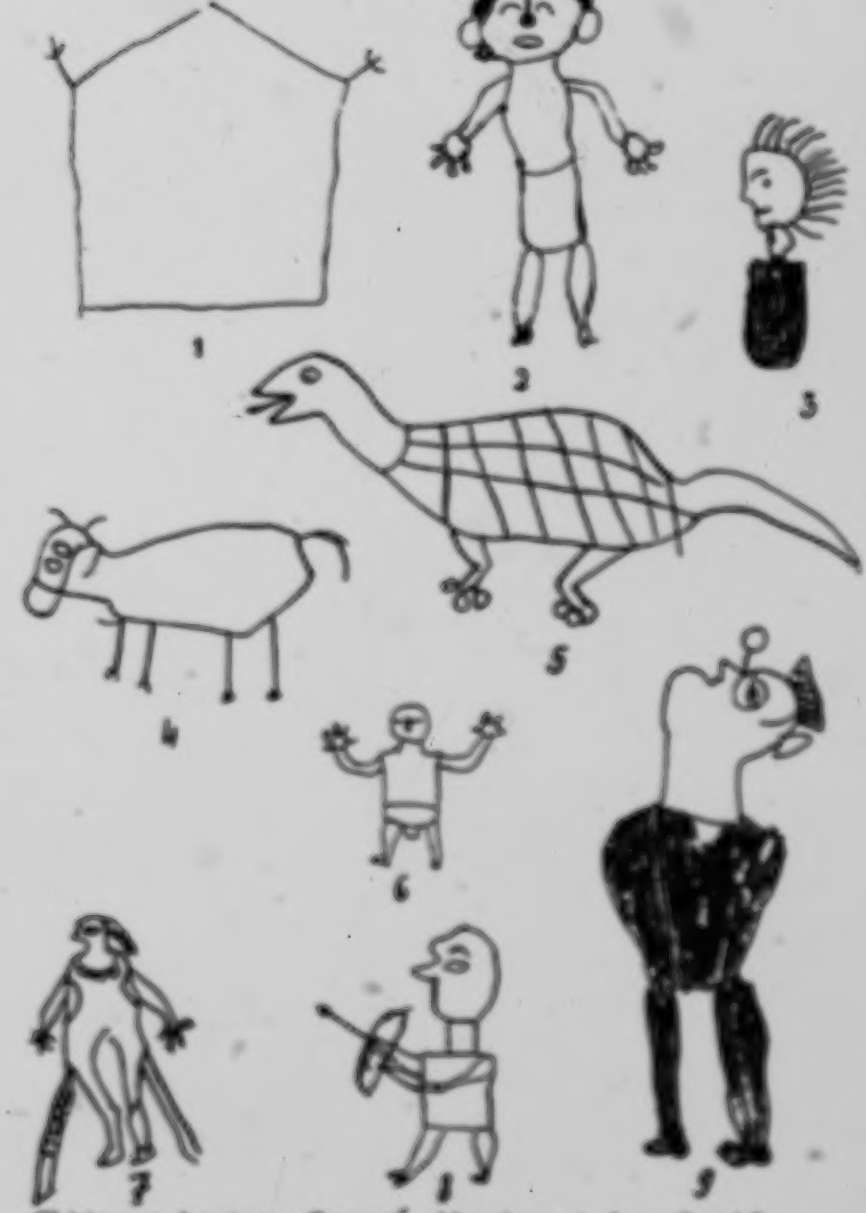
Plate XCII

Figure 1. Uru, hen (José Miguel).

Figure 2. Ñandu (nandu), drawn by Consito, who has given it the regulation number of toes on one foot, but has forgotten one on the other.

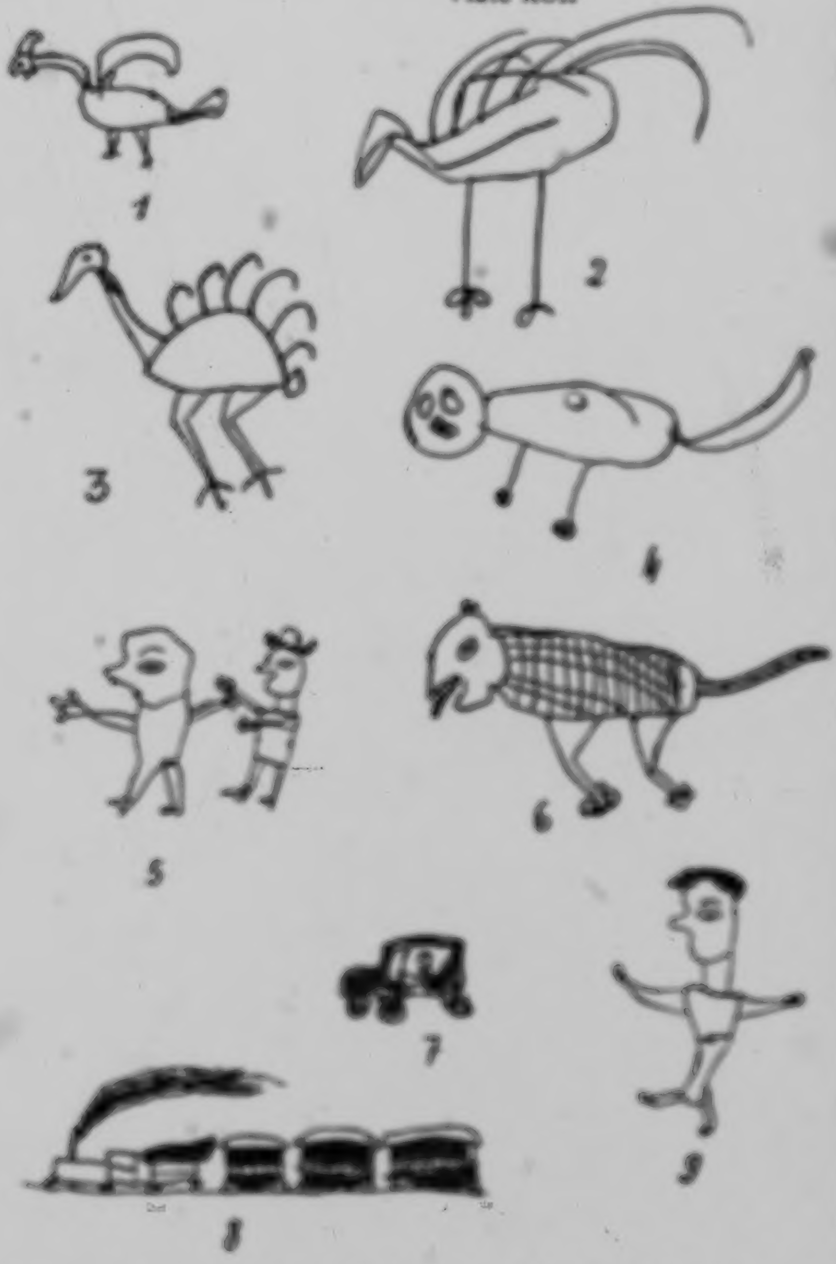
[Text Continues on P. 358]

Plate XCI



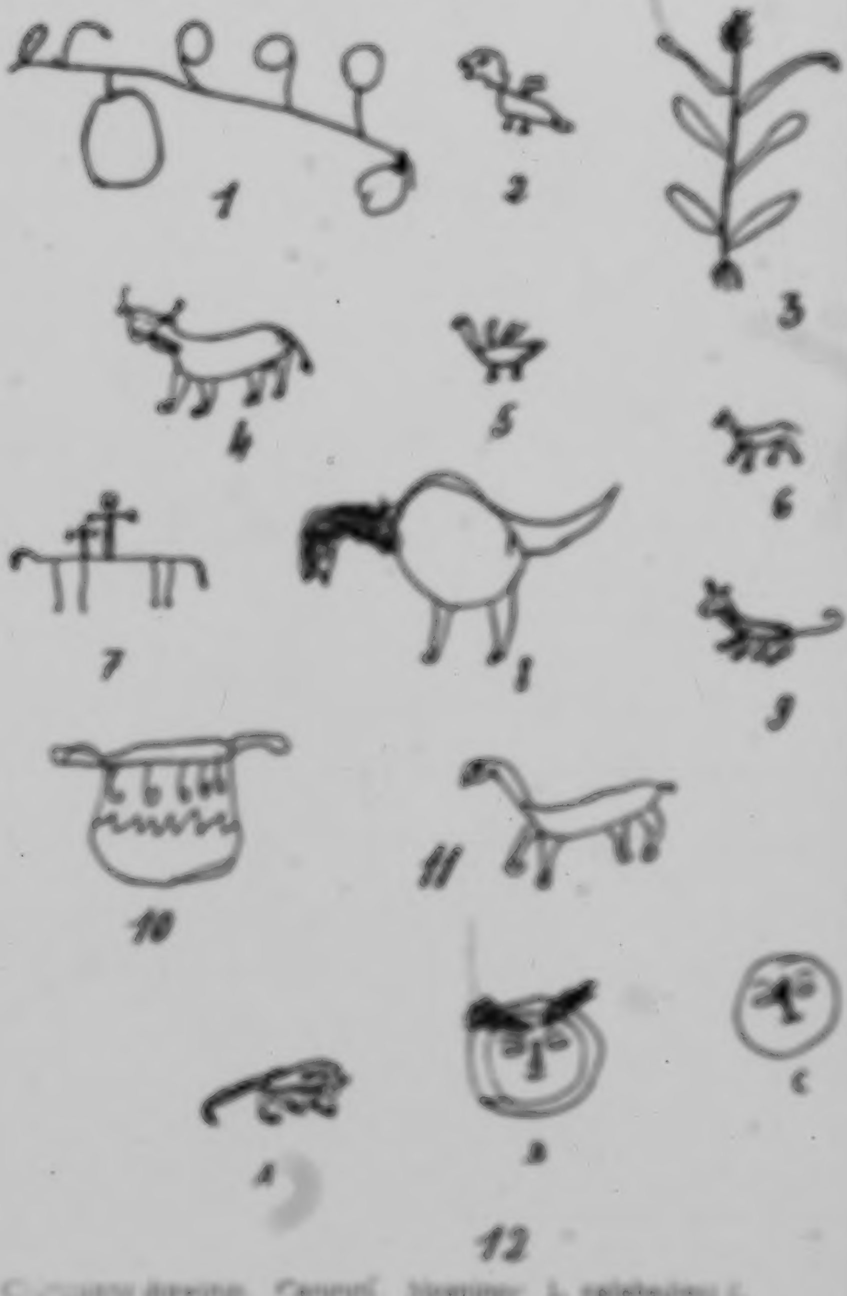
Chiriguano drawings. Carurutí. Meanings: 1, hut; 2 and 3, women; 4, dog; 5, iguana; 6, man; 7, woman; 8, Indian shooting with a bow; 9, the author.

Plate XCII



Chiriguano drawings. Caruruti. Meanings: 1, hen; 2 and 3, nandus; 4, pig; 5, a little boy and the author; 6, iguana; 7, auto; 8, train; 9, woman.

Plate XCIII



Chiriguano drawings. Caraguatí. Meanings: 1, calabashtree; 2, parrot; 3, cane; 4, cow; 5, duck; 6, dog; 7, horse and rider; woman and child; 8, anteater; 9, dog; 10 vessel; 11, guanaco; 12, A, celestial jaguar; B moon; C sun.

/479 cont./

532 Figure 3. This textile with angular lines characterizes the style of [illegible], used to drawing on a material as unyielding as bamboo.

Figure 4. This drawing is supposed to give the picture of a pig ([illegible]), whose tail, however, would be more appropriate for a fox and the face for a man ([illegible]).

Figure 5. A boy ([illegible]) and the author, recognizable by his hat and the heels of his boots (José Miguel).

Figure 6. [illegible] (jaguar), drawn by [illegible], who here again has reproduced a figure he doubtless was in the habit of engraving on his flutes. The jaguar, which is seen in profile, naturally has only two legs.

Figures 7 and 8. These two drawings, one representing a car and the other a train, are owed to José Miguel, who traveled to Argentina. They constitute a good example of the sense of observation and memory of the Chiriguano. The car has three wheels, that is, the front ones have been represented in profile, but as if they were viewed head on. [531]

Figure 9. Woman walking, drawn by José Miguel.

Plate [illegible]

Figure 1. [illegible] attached to their stem ([illegible]).

Figure 2. Parrot ([illegible]) (José Miguel).

Figure 3. Corn on stalk ([illegible]) ([illegible]).

Figure 4. Cow ([illegible]) (José Miguel).

/480/

Figure 5. Duck ([illegible]) (José Miguel).

Figure 6. Deer ([illegible]) (José Miguel).

Figure 7. Horse, and over it, a man and a child. In reality these are two distinct drawings which the artist, young [illegible], put together inadvertently.

Figure 8. Anteater ([illegible]) (José Miguel).

Figure 9. Dog ([illegible]) (José Miguel).

Figure 10. Vessel ([illegible]) decorated with isolated triangles ([illegible]).

538 /not con./

Figure 11. [illegible] (José Miguel).

[821] Figure 12. (A) blue jaguar who lives in the sky (personification of the spots on the moon) getting ready to eat the moon (B) and the sun (C), thus bringing on an eclipse.

Chapter XIV

The Treatment of Illnesses

Sorcerers and Remedies

756 178 [815] Sorcerers. Medicine men have become so rare among the Chiriguano that I could not get to know a one during my whole trip. Only on the upper Pilcomayo did they allude in front of me to a talented paye who lived in a nearby village.

Although great sorcerers endowed with supernatural powers and surrounded with great prestige no longer exist, there still must be in each village a man or woman capable of curing certain illnesses and of pronouncing incantations.

A scene I witnessed at Timboy (Salado River, upper Pilcomayo) demonstrates well that the profession of sorcerer, less important though it may be, has nevertheless not disappeared. [816] I was living in the home of a Bolivian half-breed whose child's body was covered with purulent pimples. His parents began by appealing to my medical knowledge, but I declared myself incompetent to treat his case or any other. 755 [816] They then called an old Indian woman, who appeared one morning with a plant in her hand, a kind of wild pumpkin which the half-breeds call zapallo del monte. This plant, crushed and mixed with hot water, is used for external washing. They stretched the child out on the ground and commanded him to hold himself motionless. The old woman sat down near him and began to mutter inaudible incantations which she interrupted only to spit often on the limbs of the little patient. Then she would take up her recitation again, at the same time spreading the saliva over his body from head to foot. Nordenskiold (5, p. 66,

/480 cont./

75 Fig. 16) was present at an analogous treatment also practiced /481/ by a medicine woman on a child at Yumbia, not far from the Salado. She rubbed him and blew on his body (1).

[113]
[192]

1. In the Diccionario Chiriguano-Español y Español-Chiriguano, etc. (p. 72), we find the word hungo translated "to rub, to massage" and the sentence Yyari [illegible] with the following meaning: "My grandmother rubbed me enough, but I did not get well." The medicine women, add the authors of the dictionary, use the word hungo to express the act of rubbing with the hand any painful part of the body, especially the chest, without any remedy other than the saliva they spit on their hand. These women attribute a special virtue to saliva. [827]

755
752 The sick boy's father told me that, once suffering from prolonged headaches, he had had recourse to a sorceress, an old woman with woolly hair, who was called the bruja. She sucked the place where the ache was localized and drew out worms from it. The half-breed got well, of course.

752
[825] In the toldería of [illegible], where there was a child ill with fever, his mother had made him eat crushed garrapatas (ticks). The unfortunate child's lips were purple from it.

756
855
[121] I shall devote a special study to Chiriguano medicine men in a future volume of this Review. Meanwhile I shall limit myself to describing, according to the Diccionario Chiriguano-Español y Español-Chiriguano (pp. 166-167), the way in which these powerful personages customarily proceed when they are called to the bedside of a sick person. I am forced to have recourse to the observations made by another for lack of having been able to be present myself at the spectacle which Father Giannecchini evokes with as much accuracy as vivacity. The great Chiriguano paye [illegible] all in the [illegible] where they take

/[illegible] cont./

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care of the dead and no more will any ethnographer have the privilege of being present at their [illegible].

"When an Indian is gravely ill, his relatives hasten to call a medicine man whose first duty is to hold an inquest on the origins of the illness. He asks his patient whether the symptoms of his infirmity did not coincide with a festival, whether he does not have a particular enemy, or whether his wife or children have not had a quarrel with one of their neighbors. When the sorcerer has received an answer to all these questions, he begins to make grimaces, to toss his head, to put on an afflicted air, and ends up by enunciating in an emphatic tone the result of his diagnosis: [illegible] 'My friend, this is serious, someone has perhaps poisoned you.' [illegible]. 'We shall see.'

"Then he asks for tobacco, fills his pipe, and smokes. When he has finished, he immediately begins again and continues to inhale....He becomes sick, loses the power of speech, throws convulsive looks in every direction, makes gestures as if he were trying to put phantoms to flight, faints, agonizes.... [illegible], he seems dead.... No, the impostor lives... yes, he lives and he is recovering consciousness. /[illegible]/ 'Yes,' he says to the sick person, 'I know the author of your illness, he who through hate or in a spirit of revenge is trying to take you away from your children, to throw your wife and relatives into mourning and grief. It is so-and-so.... I have seen him, I have had to struggle with him and I am almost dead. Have confidence, I have conquered him. You will not die.'

756

"Then the sorcerer demands his honorarium, which consists of ponchos, cows, horses, etc., which the sick man's relatives dare not refuse him for fear of being in turn victims of his magic power. Entire families have been seen ruined in order to pay for the trickeries of the sorcerers.

"If the sick man dies, the sorcerer has no trouble finding an /Fig. 157 appears here/ excuse, but sometimes he has to give back part of the goods he has received in payment."

/497 cont./

Judging from this text, the Chiriguano sorcerer, like his Tupinamba or Siberian colleagues, put himself into a state of trance so that his spirit, free from corporeal bonds, could go to engage in battle with the soul of the evil-intentioned individual who is implacable against his patient.

The ipaya, that is, the magical force, is indispensable to one who claims to be a good sorcerer. At least this is the meaning I give to this word translated in the Diccionario Chiriguano-Español y Español-Chiriguano etc. (p. 72) by "remedy, antidote," but of which it is said that possession is indispensable to every medicine man. This word suffixed to any noun whatever expresses the faculty, the power, the facility to make or obtain the thing signified by the noun. Thus a dog trained to hunt deer is guasu-ipaya (guasu, deer), a warrior is tovañe-ipaya (tovañe, enemy), etc.

[93]

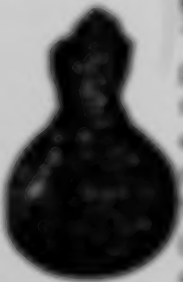

Fig. 137. Calabash containing snake fat. Prov.: Saladito. (About 1/2 nat. size.)

Remedies. 1. Snake fat (mbóiiqui) is efficacious against leprosy. The Indians keep it in a small calabash sealed with wax (Fig. 137).

2. A little cotton impregnated with castor oil (yandí) and rubbed on the skin is an excellent liniment for rheumatism.

3. A similar virtue is attributed to chicken fat (Fig. 138). In everyday life they resort to chicken fat or castor oil to anoint the body, which they then rub with urucu paste. Women generally have their

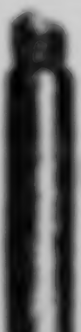

Fig. 138. Section of bamboo containing chicken fat. Prov.: Caipipendi. (1/2 nat. size.)

/405 cont./

301 faces and legs oiled in this way, which gives them a very strange reddish and shiny hue. This custom, which was already [171] noted /406/ in the sixteenth century among the Tupinamba of [178] the Brazilian coast, is tending to fall into disuse.

Roucou in paste form is kept in a small corn-husk bag (Fig. 302 139). /Fig. 139 appears here/ as is [illegible], a substance com- 384 posed of a mixture of roucou and pounded aroma seeds, which [illegible] gives a violet color.

757 4. Jaguar fat ([illegible]) cures any "leprosy" ([illegible]) if 237 one rubs oneself with it after heating it.

5. Iguana fat makes cramps go away and heals wounds. [752] Its use is external.

6. The dried penis of a fox makes toothaches and earaches go away. For that it suffices to touch the ailing part with the end /Fig. 140 appears here/ of this member. The Indians consider it very malodorous and touch it only with repugnance. [165] To avoid this inconvenience they provide it with a handle and shut it up in a bamboo case (Fig. 141).

7. Deerhorn heated and /Fig. 141 appears here/ applied against the neck will cure a stiff neck. The medical use of [172] deer (guasu) horn explains the frequent presence of the horn of this animal in the archeological strata of the neighboring Andean regions. Some have thus been found in the ruins of the Alfarcito, in the Quebrada de Humahuaca (Debenedetti, 4, p. 71), at Tilcara (Debenedetti, 3, p. 103), at La Paya (Ambrosetti, 6, Fig. 226, p. 457), and at Tastil (Boman, 7, Vol. I, Plate XXIX, Fig. 79 f).

755 Horns adhering to a fragment of the skull and whose use 759 could only have been magical or medical must be distinguished 237 from the ones which the Indians work into awls. These in- 812 struments still have a ritual use and are reserved for piercing the lower lip of children when they are old enough to wear the labret. At least this is what Campana (p. 89) informs us. Besides, the Indians all have confirmed this detail to me. [171] Formerly, the Tupinamba of Brazil practiced this operation with an awl of the same nature (see Métraux, 3, p. 185).

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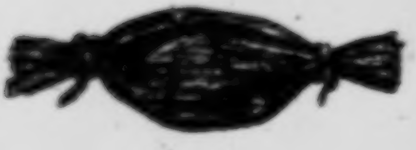

Fig. 139. Small bag made of corn husks, containing roucou paste. Prov.: Salado grande (upper Pilcomayo). (About 1/2 nat. size.)

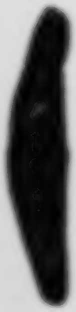

Fig. 140. Calabash containing roucou seeds. Prov.: Caipipendí. (About 1/5 nat. size.)

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→

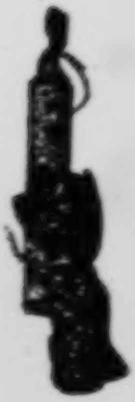

Fig. 141. Case containing a fox penis (aguara-kankuy). Prov.: Ibopeytí. (About 1/3 nat. size.)

/484/

412 However, these awls are too abundant in each village for their use to be only sacred. It is probable that the Chiriguano use them as a simple tool for solely secular purposes.

[174] At Tilcara, Debenedetti (2, Fig. 176, p. 232) discovered specimens made of deerhorn identical with our Chiriguano examples.

824 757 8. I have in my collections seeds whose virtues are multiple: they are an excellent remedy for skin eruptions, ulcers, and toothaches.

9. For stomach-ache the Chiriguano recommend the absorption of particles of wood (mboipinda).

232 [824] 10. Certain seeds (of a graminaceous plant?) when crushed give a paste or powder with which they treat animals whose sores are attacked by worms.

11. When cows' hooves tend to work loose, they bathe them with fragments of limestone (itakwi).

757 237 12. Fat extracted from a cow's foot is an effective ointment for cases of rheumatism.

13. The beak of the toucan is said to enjoy great medicinal properties. They grate it and drink in water the powder which comes from it (Câmpana, 111).

Stitches in the side and dysentery are treated with a piece of armadillo shell burned, ground, and dissolved in water, which the patient drinks.

757 [114] In the Diccionario Chiriguano-Español y Español-Chiriguano etc. (passim) and Nino's book (pp. 288-290) is found many a very interesting piece of information on the pharmacopoeia of the Chiriguano. I shall summarize them in order to complete my own observations.

757 164 1. The oil which floats on kãwi, when it is done, is a good remedy for headaches.

2. Salt, ground and drunk mixed with the urine of a small child, quiets stomach pains.

[824] 3. Rheumatism is doctored by applying on the ailing part a branch of ulala (ñankawina) from which the thorns have been removed and which has been heated.

/484 cont./

[757
824] 4. To stop dysentery, one must drink a decoction made of corn and watermelon seeds ground together.

[237] 5. Stitches in the side are treated by drinking a fragment of armadillo shell ground up and by rubbing the ailing place with a portion of this same calabash heated.

6. Tumors and swellings of the throat or knee are made to disappear by applying on the sore region the leaves of a shrub called urukuna, heated in a pot. Another herb (yundurimbiu) has the same virtue.

/485/ Urukuna leaves put in compresses on the skull dissipate headaches, protect one from congestion, and cure erysipelas. The leaves of yandipa (hediondilla) have all the virtues of urukuna.

7. Hemorrhages are stopped by means of latex or the roasted leaf of the liana supuapempe.

8. Kaa-upaya is an efficacious herb in cases of stomach ailments; and soto root cures pains in the feet (rheumatism?).

9. Guaya is a liana which cures any swelling in the side.

[753]
[821] 10. Goiter, rare among the Indians, is attributed by them to the sun. They treat it with tutía, a yellow fruit which reminds one of an apple, or by putting around the neck compresses of the blood of the gallinazo, carancho, or bandurria, kinds of vultures.

11. Ophthalmia or conjunctivitis is doctored with drops extracted from the bark of the algarrobillo or with the glue taken from the bud of the membiría plant. The leaves of yandi-wope are excellent for cases of ophthalmia.

12. A variety of caraguatá makes diarrhea stop.

13. The flower káa-ro (bitter herb) cures skin eruptions and is as good for malaria.

14. The herb inâi (tooth of water) is a remedy against whooping cough, which can also be treated with an infusion made of boiled or roasted wasps and drunk warm.

15. Tingi bark attached around the belly is excellent for fighting dropsy, as are the leaves of the aťuru (palo de india), a tree reminiscent of laurel, or the herb kaa-paye, taken as an infusion.

164 /485 cont./

757 16. Gonorrhea is treated with the boiled root of the
824 mistol and tapir fat.

[239] 17. Earaches pass away if drops of chicken, beetle, and cicada fat are poured into the auditory canal.

18. The root of chirimoya del monte (aratibu) is a good antidote if one feels poisoned.

752 19. Snake bites lose their seriousness if one applies some
824 of the herb uruuru, guaje, tobacco, or nicotine on the wound. The sap of the liana isipo-poro-mboyi, although poisonous, nonetheless constitutes an excellent antidote for the same cases.

752 20. By putting melted wax on the wound, you do not risk
239 dying when a mad dog has bitten you.

21. Wounds produced by a sharp instrument heal if burned chicken feathers are spread on them.

757 22. It suffices for a woman to drink the powder of a shell in water to put her fallen uterus back in place.

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757 23. The red leaves of the añankamisa, iwira-ro (quebracho
824 cacha) bark, the woody plant toba-pitie, taken as infusions, are as many remedies for fever.

[752] 24. Compresses of kaa-ruruntirãi make abscesses burst.

25. In case of constipation it is good to drink the latex of the kaa-si (cardencha, lechetresna).

752 26. After any serious fall one must drink water in which
757 one has made an infusion of a part of vervain (kaimberai)
824 pounded beforehand. The consequences of the shock will not be felt if one applies on the sore regions poultices made with this same plant carefully ground.

27. Recommended for spreading on sprains are cara guatá leaves or a thick glue obtained by boiling the bark of iwira-pitiyu-wasu. This substance is equally good for fractures.

757 28. The Chiriguano chew the bark of iwira-pitiyu-wasu to make
824 their violent toothaches stop and to make their teeth more solid.

29. A cataract is doctored in the following way: One boils kuruwa leaves and bathes the patient's head with this infusion.
[237] Then one takes the gall from the dorado fish with pincers or

/406 cont./

757 824 237 some similar object and rubs the sick person's eyes with it until the cataract comes off.

752 757 824 30. The tannin contained in *burupaî* bark is a disinfectant which hastens the healing of wounds.

31. The leaves of *kurupaîraî* (small *sibil*), squeezed and put into compresses on a tumor, act in a lenitive way.

757 824 [302] 32. The plant *wambero* (kind of purslane) is a laxative. It has a scarlet flower which girls dry and pulverize to be able to color their cheeks red.

[752] 33. *Iwowi* bark, pounded and roasted, is a good remedy for any pain affecting the limbs. The ash taken from the pith of this tree hastens the healing of wounds.

34. Powdered *inâ* seeds make teeth fall out.

35. The root of the *isipo-poro-mboyi*, ground and kneaded with salt and tallow, is an emollient which is spread on tumors.

36. When they feel pains in the limbs, the Chiriguano apply on the ailing part a poultice made of *iva-wasu* roots, crushed and roasted.

37. The seeds of the *yandi-wasu*, taken in doses of two or three, are a good emetic.

38. The *sarâi* is a tree reminiscent of our walnut tree. Its inner bark yields a powder which is spread on skin eruptions.

39. A climbing plant called *kaa-rowa* is supposed to have medicinal properties. /*407*/ It is taken in the form of an infusion, or poultices are made with it after it is pounded.

40. Another climbing plant, the *kaa-tai* (*barba de chivato*) is a very active caustic which can produce burns if the compresses made with its flowers, leaves, and twigs ground together and mixed with water are kept on too long. If the hands are rubbed with this plant, they become numb.

41. The roots of the shrub *mbaipiná*, well cooked, yield a broth which combats atrophy.

757 825 42. A species of bug (*tambeyûa*) is used in the native pharmacopoeia as a caustic.

757 271 43. The Chiriguano have great faith in the virtue of hot water. Every sick Indian has beside him a small vessel the size of an egg, full of hot water. Those who are attending him

/487 cont./

757 wet their finger and moisten his lips (Campana, p. 113).
271 The patient must also drink this water.

757 [195] Chiriguano medicine in the 18th century. A manuscript of the 18th century, written by Father Manuel Mingo and kept in the Library of the Colegio de Tarija, contains information of the greatest interest on the way in which the Chiriguano used to doctor themselves when they were still independent. Here is the translation of the passage in question:

"The manner in which they doctor themselves in case of sickness is curious. Sometimes, when they feel sick, they go immediately to bathe inside their house in jars or a wooden basin. Sometimes they have several herbs applied, which they go to get in the fields or thickets. Sometimes also they allow an enema or clyster to be administered to them. This instrument (according to what I could see at Tariquea) is also very curious. It comes down to a small calabash or hollow gourd with a round opening on top and a small hole at the bottom. In the lower part one fastens or puts a hollow nozzle or a small hollow reed corresponding to the nozzle. One pours through the top (that is, through the large round opening arranged in the swollen part of the calabash) a broth of urine with salt. After that, the one who is acting as nurse or orderly blows hard through the upper part or from the top by pressing his lips to the opening or window of the calabash, and the force of the breath makes the liquid pass into the patient's intestines." (Fol. 107-108).

Nordenskiöld (14, pp. 184-190), who in a recent book went full length into the matter of the various instruments utilized by the American Indians for giving enemas, distinguishes two types: those which are provided with a rubber or leather bulb or a bladder, and those which amount to a simple tube. The one described for us with such a wealth of details by our missionary belongs to the second type, although /488/ exhibiting some similarities with the first. It can be considered as intermediate between the two.

/488 cont./

757 The explorer Eric von Rosen tried to demonstrate that
114 some objects found in northwestern Argentina are clyster tubes
or nozzles. Nordenskiöld is also of this opinion. As for me,
I am all the more tempted to adopt this hypothesis because I
could not otherwise explain the presence of this instrument
757 among the Chiriguano. No Tupi tribe, as a matter of fact,
171 with the exception of the Omagua on the upper Amazon,
174 seems to have resorted to enemas in case of illness; at least
not one of the numerous travelers who gave their attention
to these Indians mentions the operation among them. There
is no doubt that the Chiriguano borrowed this curative method
and the corresponding instrument from the nearby Andean
peoples. We know that the Quichua /Quechua/ gave each
other enemas, as is proved by the discovery of a leather syringe
in a pre-Hispanic grave of the Ollachea Valley in eastern Peru
(Nordenskiöld, 14, Fig. 74, p. 188). (To be continued.)

000 /The bibliography, pp. 488-493, is omitted in the translation; see the foreign text. The following "Table of Contents" appears at the end of this volume of the Revista, along with the tables of contents for the other articles in the volume. The lists of plates and figures which follow the table of contents in the translation were made up from the captions and are not part of the original text./

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by Alfred Métraux

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